Food and Agriculture
Organization of the
United Nations

GOVERNMENT OF KENYA

Kenya
FOOD COMPOSITION
TABLES 2018

Kenya
FOOD COMPOSITION
TABLES 2018

Prepared by: Mwai J., Ministry of Health of the Republic of Kenya, Division of Family Health, Nutrition and Dietetics Unit; Kimani A. and Mbelenga E., Food and Agriculture Organization of the United Nations (Kenya); Charrondiere U.R., Grande F., Rittenschober D. and Vincent A., Food and Agriculture Organization of the United Nations (Rome); Murugu D., Bounty Health and Nutrition Consulting.

Published by: The Food and Agriculture Organization of the United Nations, The Ministry of Health, Republic of Kenya and The Ministry of Agriculture and Irrigation, Republic of Kenya.

Recommended citation: FAO/Government of Kenya. 2018. Kenya Food Composition Tables. Nairobi, 254 pp.
http://www.fao.org/3/I9120EN/i9120en.pdf

Disclaimer

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO), the Ministry of Health, Republic of Kenya or of the Ministry of Agriculture and Irrigation, Republic of Kenya concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO, or the Ministries in preference to others of a similar nature that are not mentioned. The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO, or the Ministries.

Copyright Notice

FAO encourages the use, reproduction and dissemination of material in this information product. Except where otherwise indicated, material may be copied, downloaded and printed for private study, research and teaching purposes, or for use in non-commercial products or services, provided that appropriate acknowledgement of FAO as the source and copyright holder is given and that FAO's endorsement of users' views, products or services is not implied in any way.

All requests for translation and adaptation rights, and for resale and other commercial use rights should be made via www.fao.org/contact-us/licence-request or addressed to copyright@fao.org.

FAO information products are available on the FAO website (www.fao.org/publications) and can be purchased through publications-sales@fao.org.

© FAO/Government of Kenya, 2018

ISBN 978-92-5-130445-7 (FAO)

CONTENTS

FOREWORD....v

PREFACE....vii

ACKNOWLEDGEMENTS....viii

ABBREVIATIONS....ix

1. INTRODUCTION....1
    - Background....1
    - Objectives and principles....1
2. FOODS INCLUDED....2
3. FOOD GROUPS AND CODES....3
4. SOURCES OF DATA....3
    - National sampling plan for food analysis....3
    - Data from KEN93....3
    - Data from scientific literature....4
    - Reference data....4
5. COMPONENTS....5
    - Definition and expression of nutrients....5
    - Proximates and related compounds/ factors....12
    - Minerals....14
    - Fat-soluble vitamin....14
    - Water-soluble vitamins....14
    - Amino acids....15
    - Fat-related compounds....16
    - Phytate....16
    - Oxalic acid: Oxalic acid was analyzed in some plant foods using an ionic chromatography – conductivity detection (IC–CD) method....17
6. FOOD AGGREGATION AND PRINCIPLES OF IMPUTATION....17
7. COOKED FOODS AND MIXED DISHES....17
    - Single ingredient recipes....17
    - Mixed Dishes Development - Traditional recipes from Kenya....18
    - Nutrient retention factors....20
8. DOCUMENTATION AND QUALITY CONSIDERATIONS....26
9. CONCLUSION AND RECOMMENDATIONS FOR FUTURE WORK....27

FOOD COMPOSITION TABLES....28

ENERGY, PROXIMATES, MINERALS AND VITAMINS PER 100 g EDIBLE PORTION ON FRESH WEIGHT BASIS (EP)29

Table 1: Energy, proximates, minerals and vitamins....30

CHOLESTEROL, OXALATES AND PHYTATES PER 100 g EDIBLE PORTION ON FRESH WEIGHT BASIS (EP) 169

Table 2a: Cholesterol per 100 g edible portion on fresh weight basis (EP) 170

Table 2b: Oxalate per 100 g edible portion on fresh weight basis (EP) 175

Table 2c: Phytate per 100 g edible portion on fresh weight basis (EP) 176

AMINO ACIDS 180

Table 3a: Amino acids mg per 100 g edible portion on fresh weight basis (EP) 181

Table 3b: Amino acids per gram Nitrogen 183

FATTY ACIDS 186

Table 4a(i): Fatty acids fractions per 100 g edible portion on fresh weight basis (EP) 187

Table 4a(ii): Fatty acids, saturated per 100 g edible portion on fresh weight basis (EP) 189

Table 4a(iii): Fatty acids, MUFA per 100 g edible portion on fresh weight basis (EP) 191

Table 4a (iv): Fatty acids, PUFA per 100 g edible portion on fresh weight basis (EP) 193

Table 4b (i): Fatty acids fractions per 100 g total fatty acids (FA) 195

Table 4b(ii): Fatty acids, saturated per100 g total fatty acids (FA) 197

Table 4b(iii): Fatty acids, MUFA per 100 g total fatty acids (FA) 199

Table 4b(iv): Fatty acids, PUFA per 100 g total fatty acids (FA) 201

FOOD PHOTOS AND THEIR DESCRIPTIONS 203

BIBLIOGRAPHY 216

TABLES

Table I. List of reference datasets included in KFCT2018 4

Table III. Metabolizable energy conversion factors. General Atwater factors (FAO, 2003) 12

Table IV. Nitrogen conversion factors adapted from Jones (FAO/INFOODS, 2012b) 13

Table V. Factors for loss of water/fat in foods 18

Table VI. Nutrient retention factors for vitamins 21

Table VII. Nutrient retention factors for minerals and phytate 23

Table VIII. Abbreviations and symbols 26

ANNEXES

ANNEX 1. List of yield factors 221

ANNEX 2: Limit Of Quantification (LOQ) of the Components 228

ANNEX 3: Index of foods with English, scientific names, and corresponding reference sources 229

ANNEX 4: Development of mixed dishes recipe 239

ANNEX 5: Food Sampling Team 242

ANNEX 6: List of Authors 243

ANNEX 6: Contributors 243

FOREWORD

The Government of Kenya is committed to ensuring that all citizens are free from hunger and have adequate food of acceptable quality as stipulated in the Constitution and the National Food and Nutrition Security Policy (FNSP), 2011. The FNSP advocates for multifaceted and multisectoral strategies to effectively address food insecurity and malnutrition challenges in Kenya. The broad objectives of FNSP are: to increase the quantity and quality of food available, accessible and affordable to all Kenyans at all times; to achieve good nutrition for optimum health of all Kenyans; and to protect vulnerable populations using innovative and cost-effective safety nets linked to long-term development. Understanding the quality of locally available foods is important in the development of strategies for combating food and nutrition insecurity.

The Ministry of Health and Ministry of Agriculture and Irrigation with support from the Food and Agriculture Organization of the United Nations (FAO) have developed the Kenya Food Composition Tables (KFCT), 2018. Food composition databases provide scientific base for understanding the inherent nutrient quality of foods and are important in several fields such as community and clinical nutrition, public health and education, agriculture and food manufacturing. Therefore, the KFCT will play a great role in the assessment of diet and nutritional status at a population level, development and application of food-based dietary guidelines, formulation of households and institutional diets, development of therapeutic diets, nutrition labeling of processed foods and in nutrition education and health promotion.

The first KFCT "National Food Composition Tables and the Planning of Satisfactory Diets in Kenya" was developed quarter a century ago in 1993 and therefore required to be reviewed to reflect changes in the Kenyan food system. The KFCT, 2018 contains food composition data for five hundred and twenty two (522) raw and cooked foods and one hundred and forty two (142) mixed ingredient recipes. Food samples were collected from ten regions in Kenya in recognition of the diverse geographical locations and agricultural practices. Analysis of the food samples was done in an internationally accredited laboratory ensuring the authenticity and reliability of the food composition data.

Mrs. Sicily Kariuki, EGH,
Cabinet Secretary,
Ministry of Health

MWANGI

Mwangi Kiunjuri, EGH, MGH
Cabinet Secretary,
Ministry of Agriculture and Irrigation

PREFACE

Food composition data provides food and nutrition sector, both private and public with the important guidelines in food labelling, assessment of nutrient intake to determine nutrition adequacy, diet formulation as well as in research and plant and animal breeding. The information generated is also used to establish food-based dietary guidelines for dietary diversification and food fortification. The data also help program managers in determining the relationships between disease outcome and nutrient intake. The resultant information provides the evidence base for nutrition, health and agricultural policies established to facilitate interventions meant to meet the nutrient requirements in the population through diet.

The process of the review and update started with a desk review and stakeholder consultations to take stock of the status and quality of the available food composition data. A national steering committee from relevant ministries, research organisation, academia as well as development and implementing partners was established in 2015. Through the consultative meetings, it was realised that technical capacity in food composition data was low for the program officers who were to be tasked with this activity. The Ministry of Health (MoH) with financial support from FAO sent an officer to Wageningen, in The Nertherlands for a postgraduate course on food composition data as part of capacity development. The trained officer was tasked with coordination of the review and update of KFCT.

Kenya Agriculture and Livestock Research Organisation (KALRO) through a Letter of Agreement (LoA) with FAO-UN was running a Biodiversity for Food and Nutrition (BFN) project which formed part of analytical food composition data used in the revised tables. KALRO also provide a liason office to facilitate collaboration and coordination in food composition work. The bulk of the food composition data was from the old food composition tables and the food analytical data funded under the Technical Cooperation Project (TCP) between FAO-UN and Ministry of Health.

The Kenya Food Composition Tables (KFCT) of 2018 was developed following international guidelines from International Networks of Food Data Systems (NFOODS) under FAO-UN which is mandated to improve the quality, availability, reliability and use of food composition data. KFCT has three main sections. The first part of the book has introduction and user notes. The second section has the actual tables. While the third section has the photos and their descriptions to ease the food identification by the user. Table 1 is on energy and proximates, minerals and vitamins. Table 2 has cholesterol, phytate and oxalates. Table 3 has amino acids, while Table 4 has fatty acids.

KFCT will guide both County and National Governments on the operational priorities they need to focus on in the implementation of food based approaches to reduce the burden of malnutrition in the population and support nutrition sensitive agricultural production.

Dr. Eliud K. Kireger, PhD
Director General,
Kenya Agricultural and Livestock Research Organization

Dr. Kioko Jackson K., OGW, MBS
Director of Medical Services,
Ministry of Health

ACKNOWLEDGEMENTS

The Nutrition and Dietetic Unit in the Ministry of health takes this opportunity to thank everyone who participated in the review and update of the Kenya Food Composition Tables (KFCT) 2018. The Food Composition Tables could not have been realized without the full commitment of the program officers who were mandated to spearhead this activity. The support from the government of Kenya through the Ministry of Health as well as local administration in the various Counties where foods were sampled is highly appreciated. We acknowledge the work that was undertaken in the first National Food Composition Tables and the planning of satisfactory diets in Kenya (1993) by Dr. (Mrs.) Jaswati Kaur Sehmi. This formed the basis of the Kenya Food Composition Tables 2018.

The contribution of the steering committee formed from lead organisations and ministries to steer the process is highly appreciated. The organisations and ministries represented in steering committee include Food and Agriculture Organization of the United Nations (FAO - UN), Ministry of Agriculture and Irrigation (formely, Ministry of Agriculture, Livestock and Fisheries (MoALF)), Jomo Kenyatta University of Agriculture and Technology (JKUAT), National Public Health Laboratories (NPHL), Kenya Medical Research Institute (KEMRI), Kenya Agriculture and Livestock Research Organization (KALRO), Kenyatta University, University of Eldoret, Moi University, International Centre for Research in Agroforestry (ICRAF), International Centre of Insect Physiology and Ecology (ICIPE), Kenya Nutrition and Dietetic Institute (KNDI), Kisii University, National Museum of Kenya (NMK), Nutrition International (NI), Société Générale de Surveillance (SGS), Consultative Group for International Agricultural Research (CGIAR), Nutrition Health Program plus (NHPplus), Financial Transactions and Reports Analysis Centre of Canada (FTRAC) , University of Nairobi and County Governments.

Special appreciation goes FAO - UN which tirelessly provided technical and financial support through a Technical Cooperation Project and European Union project.

Veronica Kirogo,
Head, Nutrition and Dietetics Services,
Ministry of Health

ABBREVIATIONS

Abbreviation	Description
AA	amino acid
AAS	Atomic Absorption Spectrometry
AOAC	Association of Official Analytical Chemists
CGIAR	Consultative Group for International Agricultural Research
DFE	dietary folate equivalents
DP	decimal place
DW	dry weight basis
EP	edible portion on fresh weight basis
FA	fatty acid
FAO-UN	Food and Agriculture Organization of the United Nations
FCDB	food composition database
FCT	food composition table
FTRAC	Financial Transactions and Reports Analysis Centre of Canada
FW	fresh weight basis
g	Gram
GC-FID	Gas Chromatography Flame Iodization Detection
HPLC	High Performance Liquid Chromatography
IC-CD	Ionic Chromatography Conductivity Detection
ICP	Inductively Coupled Plasma
ICIPE	International Centre of Insect Physiology and Ecology
ICRA	International Centre for Research in Agroforestry
INFOODS	International Network of Food Data Systems
IP	inositol phosphate
IP6	inositol hexaphosphate
ISO	International Organization for Standardisation
KCal	Kilocalories
KJ	Kilojoules
KEN93	Kenya Food Composition Tables, 1993
KFCT2018	Kenya Food Composition Tables, 2018
KNDI	Kenya Nutrition and Dietetic Institute
mcg	Microgram
mg	Milligram
MoALF	Ministry of Agriculture, Livestock and Fisheries
MoH	Ministry of Health
N	Nitrogen
nd	not detected
NHPplus	Nutrition Health Program plus
NI	Nutrition International
NMK	National Museum of Kenya
NPHL	National Public Health Laboratory
PA	phytic acid
R	from reference data set
RAE	Retinal Activity Equivalent
RE	Retinal Equivalent

RF	nutrient retention factor
SD	Standard Deviation
sig.	Significant
SGS	Société Générale de Surveillance
SOP	Standard Operating Procedures
TCP	Technical Cooperation Partnership
tr	Trace
YF	weight yield factor
XN	nitrogen conversion factor
XFA	fatty acid conversion factor

INTRODUCTION

Background

Food composition data describes the content of foods in terms of nutrients and energy, as well as of non-nutrients such as phytochemicals, bio-active food compounds, antinutrients or toxic components. Food composition data can be presented in tables or in databases. Food composition tables (FCT) are printed books which present nutrient values of foods. Normally, foods are listed vertically while nutrients are listed horizontally in the FCT. FCT should also contain additional important information such as documentation and food index. On the other hand, food composition database is a computerized format multi-dimensional data presentation which allows a comprehensive data documentation which is stored in different computer files (FAO/INFOODS, 2013).

The history of food composition data as food composition tables in Kenya dates back in 1950 when the chemical composition of some Kenyan foods was first given by Dr. Harvey. In 1987, Jansen et al reviewed the chemical analysis of foods in their book "Food and Nutrition in Kenya. Both of these food composition datasets were incomplete and lacked a lot of important information. In 1993, the first food composition table "National Food Composition Tables and The Planning of satisfactory Diets in Kenya" was developed by Dr. (Mrs.) Jaswati Kaur Sehmi. This book was a great improvement from the previous two food composition datasets. All the same it lacked some important components such as zinc and selenium which became of interest with time.

Since the publication of the last tables in 1993, there has been a lot of change in food system in Kenya. This is due to the implementation of some strategies such as food fortification of some foods and breeding of some improved crops through bio-fortification.

Noting that food composition data are the basis for almost all aspects of nutrition and represent the basic tools to improve nutrition, health and food security in all populations, the food composition data requires frequent review and update with the changes in lifestyle and advance in knowledge in food system.

Objectives and principles

The objectives of the review and update of the Kenya Food Composition Tables are:

- To identify and fill the data gaps in terms of missing foods and components so as to increase the quality and precision of nutrient intake estimations.
- To provide nutrient data (energy, macronutrients, main minerals and vitamins, amino acids, fatty acids classes, oxalates and phytate) for many of the raw and cooked foods and recipes consumed in Kenya.
- To present food composition data in a user friendly manner following international standards in food and component identification and compilation.
- To report compositional data with a comprehensive documentation following international standards and guidelines.

In order to achieve these objectives, the following principles were applied:

- Compile complete nutrient data sets of foods by reporting as few missing data as possible;
- Represent the mean composition of food based on available analytical data; only if no or very few analytical data are found, non-analytical data from published FCT/FCDB are to be used;
- Describe foods as precisely as possible by including the scientific name as the reference point to correctly identify the food.
- Be as precise as possible when estimating values or borrowing data to fill the existing gaps.
- Evaluate, standardize, compile and document data according to international standards. The following FAO/INFOODS tools were used:
    - INFOODS Compilation Tool Version 1.2.1 (FAO/INFOODS, 2011)
    - INFOODS food component identifiers, called tagnames (FAO/INFOODS, 2014)
    - Guidelines for Converting Units, Denominators and Expressions Version 1.0 (FAO/INFOODS, 2012b)
    - Guidelines for Food Matching Version 1.2 (FAO/INFOODS, 2012c)
    - Guidelines for Checking Food Composition Data prior to Publication of a User Table/ Database Version 1.0 (FAO/INFOODS, 2012a)

2. FOODS INCLUDED

To decide on the foods to be included in the KFCT2018, a technical team from steering committee together with other food experts from line ministries and research organizations held a workshop to prioritize on the foods. This was done at two levels. The first was to agree on the foods to be included in the KFCT and the second was to choose the food for food analysis. The criteria used in the prioritization was based on food consumption frequency, commonly consumed foods, foods rich in nutrient(s) of public health interest and market share of the food especially the commercial packaged foods.

Five hundred and nine (509) raw and cooked food entries are included in the current food composition tables. All these foods are grouped into food groups and arranged in alphabetical order in each food group. The list of food groups and their codes is provided here below. Additionally, one hundred and forty two (142) mixed ingredient (dish) recipes are included. Mixed dishes are presented as the last group of the presented foods.

3. FOOD GROUPS AND CODES

CODE	FOOD GROUPS
01	Cereals and cereal products
02	Starchy roots, bananas and tubers
03	Legumes and pulses
04	Vegetables and vegetable products
05	Fruits and fruit products
06	Milk and dairy products
07	Meats, poultry and eggs
08	Fish and sea foods
09	Oils and fats
10	Nuts and seeds
11	Sugar and sweetened products
12	Beverages
13	Condiments and spices
14	Insects
15	Mixed dishes

4. SOURCES OF DATA

National sampling plan for food analysis

An elaborate food sampling protocol of 62 prioritized foods was developed prior to food sampling. This protocol guided in training of samplers, determination of the ten regions for food sampling, identification of foods, food collection, packing and shipment to the holding laboratory. Sampling was done by trained officers from Ministries of health and agriculture who were taken through a training program on food sampling. They also did pretesting in the nearby markets during the training. In total sixty two foods were sampled from ten regions. These food samples were packaged according to the state of the food and its packaging and shipment requirements. They were delivered to the holding laboratory in the National Public Health Laboratory (NPHL) of Ministry of Health within the same day of sampling. From NPHL, they were delivered by air to SGS laboratory in Mombasa for preparation and analysis. In SGS laboratory, food samples were prepared to determine the edible portion of selected foods as well as laboratory and analytical samples. Samples were analysed in SGS laboratories in Mombasa, Thailand and Germany. The analytical results were taken through an elaborate review process by the technical team from Kenya and FAO Rome. Final analytical data from the 62 foods was compiled into the INFOODS compilation tool.

Data from KEN93

The data of Kenya food composition tables of 1993 was only available in hard copy. All this data was entered into the compilation tool. Most of this data was analytical data of foods sampled in Kenya and was considered of sufficient quality. It was therefore used as the basis for deciding on which foods required partial analysis during food prioritization for sampling and analysis. This data was also used as a priority data during imputation.

Data from scientific literature

Some of the data used in the update of KFCT2018 was from research and academic institutions. Officers from MoH were tasked to do online literature search or visit research and academic institution to look for analytical data. The collected articles were evaluated for the quality of the data and those which were meeting the quality standards were entered into the compilation tool. They were then scrutinized together with other available data to confirm the consistency and accuracy. A lot of food composition data articles were collected but due to poor quality of data, only sixteen articles qualified to have data entered into the FAO/INFOODS Compilation Tool and subsequently used in imputations in the current tables.

Reference data

For the purpose of imputation, selected reference datasets, i.e. national or reginal compiled FCT/FCDB were used to fill the missing values providing nutrient data for a wider range of foods in a standardized way. The component names were assigned to INFOODS tagnames and appropriate unit conversions were carried out. The list of reference datasets included in KFCT2018 are presented in the table I below.

Table I. List of reference datasets included in KFCT2018

RefID	Bibliography
AU14	Australian Food, Supplement and Nutrient Database (AUSNUT) 2011-2013. Retrieved from: http://www.foodstandards.gov.au/science/monitoringnutrients/ausnut/pages/default.aspx
IN17	Longvah T., Ananthan R., Bhaskarachary K., & Venkaiah K. (2017). Indian Food Composition Tables 2017. National Institute of Nutrition. Indian Council of Medical Research. Department of Health Research. Ministery of Health and Family Welfare, Government of India. Hyderabad.
UF1	FAO. 2016. FAO/INFOODS Global food composition database for fish and shellfish – version 1.0 (uFiSh1.0). Rome, FAO. Retrieved form http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases/en/
UK7	Public Health England (2015) McCance and Widdowson's The Composition of Foods Integrated Dataset (CoFID) 2015. Prepared by Finglas P., Roe M., Pinchen H., Berry R., Church S., Dodhia S., Powell N., Farron-Wilson M., McCardle J., & Swan G, Institute of Food Research. Public Health England, London. Retrieved from https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid. Open Government Licence https://www.nationalarchives.gov.uk/doc/open-government-licence/version/2/.
UP1	FAO. 2017. FAO/INFOODS Global Food Composition Database for Pulses Version 1.0 - uPulses 1.0. Rome, FAO. Retrieved form http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases/en/
US28	U.S. Department of Agriculture, (2015). USDA National Nutrient Database for Standard Reference, Release 28. U.S. Department for Agriculture, Agricultural Research Service, Nutrient Data Laboratory. Retrieved from http://ndb.nal.usda.gov/.

It is advised to check the documentation or user guide of the reference datasets for the exact component definition (i.e. analytical method, calculation, expression), as well as the FAO/INFOODS webpage for more information on the definition and description of INFOODS tagnames (FAO/INFOODS, 2016).

COMPONENTS

Definition and expression of nutrients

All component values are given per 100 g edible portion on fresh weight basis (EP). INFOODS component identifiers, also called tagnames (Klensin et al., 1989; INFOODS, 2012) were used to describe all food components. The values per nutrient have been standardized and are expressed in fixed maximal number of decimal points, i.e. no decimal points were added but values with higher decimal points were truncated to the maximal number of decimal points. Table 11a, Table 11b and Table 11c list the components with their INFOODS component identifiers, units, denominators and maximal number of decimal places.

Table 11a: List of components with corresponding INFOODS tagnames, units, denominators and decimal places

Component	INFOODS tagname	Unit	Denominator	Maximal deimal. places	Table	Comment
Edible portion coefficient	EDIBLE			2	1	Presented as the edible portion of the total food as purchased
Energy	ENERC	kJ, kcal	/100 g EP	0	1	Calc. from energy-yielding components FAT, CHOAVLDF, PROTCNT, FIBTG (Equation 1 and Equation 2)
Water	WATER	g	/100 g EP	1	1	
Nitrogen, total	NT	g	/100 g EP	2	1	
Protein, total	PROTCNT	g	/100 g EP	1	1	Calc. from NT using the correct nitrogen-to-protein conversion factor (Equation 3)
Fat, total	FATCE	g	/100 g EP	1	1	Derived by analysis using continuous extraction
Cholesterol	CHOLE	g	/100 g EP	0	2	
Carbohydrate available, by difference	CHOAVLDF	g	/100 g EP	1	1	Calc. from proximates WATER, FAT, PROTCNT, ASH, FIBTG and ALC (Equation 4)
Fibre, total dietary	FIBTG	g	/100 g EP	1	1	
Alcohol	ALC	g	/100g EP	0		
Ash	ASH	g	/100 g EP	1	1	
Calcium	CA	mg	/100 g EP	0	1	
Iron	FE	mg	/100 g EP	1	1	
Magnesium	MG	mg	/100 g EP	0	1	
Phosphorus	P	mg	/100 g EP	0	1	
Potassium	K	mg	/100 g EP	0	1	
Sodium	NA	mg	/100 g EP	0	1	

Component	INFOODS tagname	Unit	Denominator	Maximal deimal. places	Table	Comment
Zinc	ZN	mg	/100 g EP	2	1	
Selenium		µcg	/100 g EP	0	1	
Vitamin A (RAE)	VITA_RAE	µg	/100 g EP	0	1	(Equation 6)
Vitamin A (RE)	VITA	µg	/100 g EP	0	1	(Equation 7)
Retinol	RETOL	µg	/100 g EP	0	1	
β-carotene equivalent	CARTBEQ	µg	/100 g EP	0	1	(Equation 5)
Thiamin	THIA	mg	/100 g EP	2	1	
Riboflavin	RIBF	mg	/100 g EP	2	1	
Niacin	NIA	mg	/100 g EP	1	1	
Dietary folate equivalent	FOLDFE	µg	/100 g EP	0	1	(Equation 9)
Folic acid	FOLAC	µg	/100 g EP	0	1	(Equation 8)
Food folate	FOLFD	µg	/100 g EP	0	1	Naturally occurring food folates
Folate	FOL	µg	/100 g EP	0	1	Not preferred/improper tagnames: FOLSUM, sum of vitamers determined by HPLC
Vitamin B12	VITB12	µg	/100 g EP	2	1	
Vitamin C	VITC	mg	/100 g EP	1	1	
Phytic acid	PHYTCPPD	mg	/100 g EP	0	2	determined by direct precipitation
Inositol triphosphate	IP3	mg	/100 g EP	0	2	
Inositol tetraphosphate	IP4	mg	/100 g EP	0	2	
Inositol pentaphosphate	IP5	mg	/100 g EP	0	2	
Inositol hexaphosphate	IP6	mg	/100 g EP	0	2	
Oxalate	OXALAC	mg	/100 g EP	0	2	

Table 11b: List of amino acids with corresponding INFOODS component identifier, units and denominators

Amino acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Isoleucine	ILE	Mg	/100 g EP	3	3a	Calc. from ILE/g N
			/g N	3	3b	
Leucine	LEU	Mg	/100 g EP	3	3a	Calc. from LEU/g N
			/g N	3	3b	
Lysine	LYS	Mg	/100 g EP	3	3a	Calc. from LYS/g N
			/g N	3	3b	
Methionine	MET	Mg	/100 g EP	3	3a	Calc. from MET/g N
			/g N	3	3b	
Cystine	CYS	Mg	/100 g EP	3	3a	Calc. from CYS/g N
			/g N	3	3b	
Phenylalanine	PHE	Mg	/100 g EP	3	3a	Calc. from PHE/g N
			/g N	3	3b	
Tyrosine	TYR	Mg	/100 g EP	3	3a	Calc. from TYR/g N
			/g N	3	3b	
Threonine	THR	Mg	/100 g EP	3	3a	Calc. from THR/g N
			/g N	3	3b	
Tryptophan	TRP	Mg	/100 g EP	3	3a	Calc. from TRP/g N
			/g N	3	3b	
Valine	VAL	Mg	/100 g EP	3	3a	Calc. from VAL/g N
			/g N	3	3b	
Arginine	ARG	Mg	/100 g EP	3	3a	Calc. from ARG/g N
			/g N	3	3b	
Histidine	HIS	Mg	/100 g EP	3	3a	Calc. from HIS/g N
			/g N	3	3b	
Alanine	ALA	Mg	/100 g EP	3	3a	Calc. from ALA/g N
			/g N	3	3b	
Aspartic acid	ASP	Mg	/100 g EP	3	3a	Calc. from ASP/g N
			/g N	3	3b	
Glutamic acid	GLU	Mg	/100 g EP	3	3a	Calc. from GLU/g N
			/g N	3	3b	
Glycine	GLY	Mg	/100 g EP	3	3a	Calc. from GLY/g N
			/g N	3	3b	
Proline	PRO	Mg	/100 g EP	3	3a	Calc. from PRO/g N
			/g N	3	3b	
Serine	SER	Mg	/100 g EP	3	3a	Calc. from SER/g N
			/g N	3	3b	

Table 11c: List of fatty acids with corresponding INFOODS component identifiers (tagname), unit (U), denominators and number of significant digits

Fatty acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Fatty acids, total	FACID	G	/100 g EP	3	4a	Calc. from FAT using XFA (Equation 10)
Saturated fatty acids, total	FASAT	G	/100 g EP	3	4a	Calc. from FASAT/100 g total FA
			/100 g total FA	3	4b	
Monounsaturated fatty acids, total	FAMS	G	/100 g EP	3	4a	Calc. from FAMS/100 g total FA
			/100 g total FA	3	4b	
Polyunsaturated fatty acids, total	FAPU	G	/100 g EP	3	4a	Calc. from FAPU/100 g total FA
			/100 g total FA	3	4b	
Fatty acids, trans, total	FATRN	G	/100 g EP	3	4a	Calc. from FATRN/100 g total FA
			/100 g total FA	3	4b	
Fatty acids non-identified, total	FAUN	G	/100 g EP	3	4a	Calc. from FAUN/100 g total FA
			/100 g total FA	3	4b	
n-3 polyunsaturated fatty acids	FAPUN3	G	/100 g EP	3	4a	Calc. from FAPUN3/100 g total FA
			/100 g total FA	3	4b	
n-6 polyunsaturated fatty acids	FAPUN6	G	/100 g EP	3	4a	Calc. from FAPUN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 4:0	F4D0	G	/100 g EP	3	4a	Calc. from F4D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 6:0	F6D0	G	/100 g EP	3	4a	Calc. from F6D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 8:0	F8D0	G	/100 g EP	3	4a	Calc. from F8D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 9:0	F9D0	G	/100 g EP	3	4a	Calc. from F9D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 10:0	F10D0	G	/100 g EP	3	4a	Calc. from F10D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 11:0	F11D0		/100 g EP	3	4a	Calc. from F11D0/100 g total FA
					4b	
Fatty acid 12:0	F12D0	G	/100 g EP	3	4a	Calc. from F12D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 13:0	F13D0	G	/100 g EP	3	4a	Calc. from F13D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 14:0	F14D0	G	/100 g EP	3	4a	Calc. from F14D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 15:0	F15D0	G	/100 g EP	3	4a	Calc. from F15D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:0	F16D0	G	/100 g EP	3	4a	Calc. from F16D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 17:0	F17D0	G	/100 g EP	3	4a	Calc. from F17D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:0	F18D0	G	/100 g EP	3	4a	Calc. from F18D0/100 g total FA
			/100 g total FA	3	4b	

Fatty acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Fatty acid 19:0	F19D0	G	/100 g EP	3	4a	Calc. from F19D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:0	F20D0	G	/100 g EP	3	4a	Calc. from F20D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 21:0	F21D0	G	/100 g EP	3	4a	Calc. from F21D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:0	F22D0	G	/100 g EP	3	4a	Calc. from F22D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 23:0	F23D0	G	/100 g EP	3	4a	Calc. from F23D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 24:0	F24D0	G	/100 g EP	3	4a	Calc. from F24D0/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 14:1	F14D1	G	/100 g EP	3	4a	Calc. from F14D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 14:1 cis n-5	F14D1CN5	G	/100 g EP	3	4a	Calc. from F14D1CN5/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 14:1 trans n-5	F14D1TN5	G	/100 g EP	3	4a	Calc. from F14D1TN5/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 15:1	F15D1	G	/100 g EP	3	4a	Calc. from F15D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 15:1 cis n-5	F15D1CN5	G	/100 g EP	3	4a	Calc. from F15D1CN5/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:1	F16D1	G	/100 g EP	3	4a	Calc. from F16D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:1 cis n-9	F16D1CN9	G	/100 g EP	3	4a	Calc. from F16D1CN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:1 cis n-7	F16D1CN7	G	/100 g EP	3	4a	Calc. from F16D1CN7/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:1 trans n-7	F16D1TN7	G	/100 g EP	3	4a	Calc. from F16D1TN7/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 17:1	F17D1	G	/100 g EP	3	4a	Calc. from F17D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 17:1 cis	F17D1C	g	/100 g EP	3	4a	Calc. from F17D1C/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1	F18D1	G	/100 g EP	3	4a	Calc. from F18D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 trans n-12	F18D1TN12	G	/100 g EP	3	4a	Calc. from F18D1TN12/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 cis n-9	F18D1CN9	G	/100 g EP	3	4a	Calc. from F18D1CN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 trans n-9	F18D1TN9	G	/100 g EP	3	4a	Calc. from F18D1TN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 cis n-7	F18D1CN7	G	/100 g EP	3	4a	Calc. from F18D1CN7/100 g total FA
			/100 g total FA	3	4b	

Fatty acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Fatty acid 18:1 trans n-7	F18D1TN7	G	/100 g EP	3	4a	Calc. from F18D1TN7/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 cis n-6	F18D1CN6	G	/100 g EP	3	4a	Calc. from F18D1CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 cis	F18D1C	G	/100 g EP	3	4a	Calc. from F18D1C/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:1 trans	F18D1T	G	/100 g EP	3	4a	Calc. from F18D1T/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:1	F20D1	G	/100 g EP	3	4a	Calc. from F20D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:1 cis n-9	F20D1CN9	G	/100 g EP	3	4a	Calc. from F20D1CN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:1 trans n-9	F20D1TN9	G	/100 g EP	3	4a	Calc. from F20D1TN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:1 cis	F20D1C	G	/100 g EP	3	4a	Calc. from F20D1C/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:1	F22D1	G	/100 g EP	3	4a	Calc. from F22D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:1 cis n-9	F22D1CN9	G	/100 g EP	3	4a	Calc. from F22D1CN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:1 trans n-9	F22D1TN9	G	/100 g EP	3	4a	Calc. from F22D1TN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:1 cis	F22D1C	G	/100 g EP	3	4a	Calc. from F22D1C/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 24:1	F24D1	G	/100 g EP	3	4a	Calc. from F24D1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 24:1 cis n-9	F24D1CN9	G	/100 g EP	3	4a	Calc. from F24D1CN9/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 24:1 cis	F24D1C	G	/100 g EP	3	4a	Calc. from F24D1C/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:2	F16D2	G	/100 g EP	3	4a	Calc. from F16D2/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:2 cis n-4	F16D2CN4	G	/100 g EP	3	4a	Calc. from F16D2CN4/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:2	F18D2	G	/100 g EP	3	4a	Calc. from F18D2/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:2 cis n-6	F18D2CN6	G	/100 g EP	3	4a	Calc. from F18D2CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:2 trans n-6	F18D2TN6	G	/100 g EP	3	4a	Calc. from F18D2TN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:2 conjugated	F18D2CLA	G	/100 g EP	3	4a	Calc. from F18D2CLA/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:2 trans	F18D2T	G	/100 g EP	3	4a	Calc. from F18D2T/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:2	F20D2	G	/100 g EP	3	4a	Calc. from F20D2/100 g total FA
			/100 g total FA	3	4b	

Fatty acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Fatty acid 20:2 cis n-6	F20D2CN6	G	/100 g EP	3	4a	Calc. from F20D2CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:2	F22D2	G	/100 g EP	3	4a	Calc. from F22D2/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:2 cis n-6	F22D2CN6	G	/100 g EP	3	4a	Calc. from F22D2CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:3	F18D3	G	/100 g EP	3	4a	Calc. from F18D3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:3 cis n-6	F18D3CN6	G	/100 g EP	3	4a	Calc. from F18D3CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:3 cis n-3	F18D3CN3	G	/100 g EP	3	4a	Calc. from F18D3CN3/100 g total FA
			/100 g total FA	3	4b	

Fatty acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Fatty acid 18:3 trans	F18D3T	G	/100 g EP	3	4a	Calc. from F18D3T/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:3	F20D3	G	/100 g EP	3	4a	Calc. from F20D3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:3 cis n-6	F20D3CN6	G	/100 g EP	3	4a	Calc. from F20D3CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:3 cis n-3	F20D3CN3	G	/100 g EP	3	4a	Calc. from F20D3CN3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:3	F22D3	G	/100 g EP	3	4a	Calc. from F22D3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:3 cis n-3	F22D3CN3	G	/100 g EP	3	4a	Calc. from F22D3CN3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:4	F16D4	G	/100 g EP	3	4a	Calc. from F16D4/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 16:4 cis n-1	F16D4CN1	G	/100 g EP	3	4a	Calc. from F16D4CN1/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:4	F18D4	G	/100 g EP	3	4a	Calc. from F18D4/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 18:4 cis n-3	F18D4CN3	G	/100 g EP	3	4a	Calc. from F18D4CN3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:4	F20D4	G	/100 g EP	3	4a	Calc. from F20D4/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:4 cis n-6	F20D4CN6	G	/100 g EP	3	4a	Calc. from F20D4CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:4 n-6	F20D4N6	G	/100 g EP	3	4a	Calc. from F20D4N6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:4	F22D4	G	/100 g EP	3	4a	Calc. from F22D4/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:4 cis n-6	F22D4CN6	G	/100 g EP	3	4a	Calc. from F22D4CN6/100 g total FA
			/100 g total FA	3	4b	

Fatty acid	INFOODS tagname	Unit	Denominator	Significant digits	Table	Comment
Fatty acid 20:5	F20D5	G	/100 g EP	3	4a	Calc. from F20D5/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 20:5 cis n-3	F20D5CN3	G	/100 g EP	3	4a	Calc. from F20D5CN3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:5	F22D5	G	/100 g EP	3	4a	Calc. from F22D5/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:5 cis n-6	F22D5CN6	G	/100 g EP	3	4a	Calc. from F22D5CN6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:5 cis n-3	F22D5CN3	G	/100 g EP	3	4a	Calc. from F22D5CN3/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:6	F22D6	G	/100 g EP	3	4a	Calc. from F22D6/100 g total FA
			/100 g total FA	3	4b	
Fatty acid 22:6 cis n-3	F22D6CN3	G	/100 g EP	3	4a	Calc. from F22D6CN3/100 g total FA
			/100 g total FA	3	4b	

Proximates and related compounds/ factors

Energy: The metabolizable energy values of all foods are presented in both kilojoules (kJ) and kilocalories (kcal). These are calculated based on protein, fat, available carbohydrates, dietary fibre and alcohol by applying the energy conversion factors as given in **Table III**.

Table III. Metabolizable energy conversion factors. General Atwater factors (FAO, 2003)

Component	kJ/g	Kcal/g
Protein	17	4
Fat	37	9
Available carbohydrates	17	4
Dietary fibre	8	2
Alcohol*	29	7

* The alcohol content for alcoholic beverages is indicated in the food name.

Equation 1. *Energy (kJ/100 g EP) = total protein (g/100 g EP) x 17 + total fat (g/100 g EP) x 37 + available carbohydrates (g/100 g EP) x 17 + dietary fibre (g/100 g EP) x 8 + alcohol (g/100 g EP) x 29*

Equation 2. *Energy (kcal/100 g EP) = total protein (g/100 g EP) x 4 + total fat (g/100 g EP) x 9 + available carbohydrates (g/100 g EP) x 4 + dietary fibre (g/100 g EP) x 2 + alcohol (g/100 g EP) x 7*

Water: Water was measured as the loss of weight after drying the food sample to constant weight. Values may derive from different drying methods used.

Nitrogen, total and protein, total: The protein content is calculated by multiplying the nitrogen values in the samples with the nitrogen conversion factors (XN) (Equation 3).

Equation 3. *Total protein (g/100 g EP) = total nitrogen (g/100 g EP) x nitrogen conversion factor (XN)*

The specific conversion factors adapted from Jones (1941) were applied (Table IV). If no specific factor was given, the general nitrogen conversion factor of 6.25 was used. The analytical method used to determine the nitrogen content of foods was ISO 5983-2 (Kjeldhal Method). For the compiled data, the main analytical method used to determine total nitrogen was also the Kjeldahl method.

Table IV. Nitrogen conversion factors adapted from Jones (FAO/INFOODS, 2012b)

Foodstuff	Factor (XN)	Foodstuff	Factor (XN)
Animal products		**Plant products**	
Meat and fish	6.25	Millet	5.83
Milk	6.38	Beans	6.25
Eggs	6.25	Soya	5.71
Plant products		Mushrooms	4.38
Wheat – whole kernel	5.83	Coffee	5.30
Wheat – endosperm	5.70	Almond	5.18
Rice	5.95	Ground nut	5.46
Maize	6.25	Other nuts	5.30

Fat, total: The fat value refers to total lipid including triglycerides, phospholipids, sterols and related compounds. The analytical methods used to determine total fat were ISO 6492 (solvent extraction with petroleum-ether) for plant foods and AOAC 2000.18 (Gerber method) or AOAC 991.36 for animal products. In few foods, where only Soxhlet (ether continuous extraction) data were available the values are marked in [ ].

Carbohydrates, available, calculated by difference: The content of available carbohydrates is estimated by difference according to Equation 4.

Equation 4: *Available carbohydrates by difference (g/100 g EP) = 100 - water (g/100 g EP) - total fat (g/100 g EP) - total protein (g/100 g EP) - total dietary fibre (g/100 g EP) - ash (g/100 g EP).*

The content of available carbohydrate is assumed to be zero for raw meat and fish (excluding molluscs and offal, e.g. liver).

Fibre, total dietary: The content of dietary fibre was analyzed with ASU L 00.00-18, mod. Method. This method corresponds to AOAC 985.29. This is a mixture of non-starch polysaccharides, lignin, resistant starch and resistant oligosaccharides. Most borrowed dietary fibre values were analysed or assumed to be measured by Prosky and similar methods. Total dietary fibre is assumed to be zero in animal source foods, except insects.

Alcohol: Alcohol is assumed to be zero in all foods except alcoholic beverages. For these foods, the alcohol content is indicated in the food name.

Ash: The ash content of foods was determined using muffle furnace by gravimetric method. The borrowed data were determined by similar methods.

Minerals

The following minerals are included in the FCT: calcium, iron, magnesium, phosphorus, potassium, sodium, zinc and selenium. Levels of minerals for most foods were determined by SOP SGS TW 59 in plant foods and by ISO 8070-IDF 119 in animal products. For compiled data several determination methods were reported by the sources, including atomic absorption spectrometry (AAS), inductively coupled plasma (ICP), ICP-mass spectrometry, and colorimetric methods.

Fat-soluble vitamin

Vitamin A: Vitamin A is comprised of multiple active compounds, each of them with different biological activity. Retinol is the most bioactive form and is normally only present in animal source foods. Data for individual carotenoids (β-carotene, α-carotene, β-cryptoxanthin) are used to calculate β-carotene equivalents according to Equation 5. In some cases, where only β-carotene was available, the value is marked in [ ].

> ***Equation 5.*** *β-carotene equivalents (mcg) = 1 mcg β-carotene + 1/2 mcg α-carotene + 1/2 mcg β-cryptoxanthin.*

The analytical data were generated using High Performance Liquid Chromatography (HPLC) methodology (DIN EN 12823-2 for carotenoids and SOP LBFD-99076 for retinol). The borrowed data were determined by similar methods. The retinol content is assumed to be zero for raw plant foods, with the exception of some fortified foods such as packaged wheat and maize flour as well as fats and oils. Total vitamin A is presented both as Retinol Activity Equivalent (RAE) and Retinol Equivalent (RE), calculated according to the following equations:

> ***Equation 6.*** *Total vitamin A activity expressed as Retinol Activity Equivalent (RAE) (mcg/100 g EP) = mcg retinol + 1/12 mcg β- carotene + 1/24 mcg α-carotene + 1/24 mcg β-cryptoxanthin*

> ***Equation 7.*** *Total vitamin A activity expressed as Retinol Equivalent (RE) (mcg/100 g EP) = mcg retinol + 1/6 mcg β-carotene + 1/12 mcg α-carotene + 1/12 mcg β-cryptoxanthin*

Water-soluble vitamins

Thiamin: Thiamin was determined chemically by fluorimetry using HPLC (DIN EN 14122 and SOP LBFD-00089 based on AOAC 942.23). For compiled data values are expressed as thiamin only.

Riboflavin: Riboflavin was determined chemically by fluorimetry and HPLC (DIN EN 14152 and SOP LBFD-00084 based on AOAC (2012) 970.65). For compiled data, sources reported microbiological, fluorimetry and HPLC methods for the determination of riboflavin.

Niacin: Niacin values were determined by microbiological methods (AOAC 944.13 and SOP LBFD-05304 based on AOAC 985.34). The borrowed data were determined by similar methods. For both analyzed and compiled data, values are for preformed niacin only (NIA).

Folate: Total folate was determined by microbiological assay (AOAC 2004.05 and USFDA (1996)). The borrowed data were determined by similar methods. Values referring to other analytical methods (e.g. HPLC) are indicated in [ ]. Values are also reported for folic acid (added in fortified foods) and food folate (naturally occurring form) since they are required to calculate the Dietary Folate Equivalents (DFE).

For unenriched foods, food folate is considered equivalent to total folate since folic acid occurs rarely in foods. Therefore, the folic acid value is assumed to be zero.

For enriched products, the value for food folate is borrowed from reference data (other food composition databases listed on Table I). The folic acid value is calculated by subtracting the analytical value for total folate from the borrowed data for food folate (Equation 8). For these foods, the DFE value is marked with an asterisk (*) to indicate that the value includes folic acid. The folic acid content is indicated in a foot note after the food code.

Equation 8. *Folic acid (mcg/100 g EP) = mcg total folate – mcg food folate*

Dietary Folate Equivalents (DFE) is calculated according to the following equation:

Equation 9. *Dietary Folate Equivalents (DFE) (mcg/100 g EP) = mcg food folate + (1.7 * mcg folic acid)*

Vitamin B$_{12}$: Vitamin B$_{12}$ is found intrinsically in foods of animal origin and was analyzed by microbiological assay (SOP LBFD-00114 based on AOAC 952.20). Vitamin B$_{12}$ is assumed as zero for all plant foods with the exception of mushrooms and fortified foods such as packaged maize and wheat flour.

Vitamin C: Values for vitamin C include both L-ascorbic acid and L-dehydroascorbic acid. Vitamin C was determined by HPLC (SOP M 547 and SOP LBFD-00085). The borrowed data were determined by similar methods. Where only ascorbic acid data was available, the values are marked in [ ].

Amino acids

The amino acid (AA) content is given for 18 amino acids for each food, presented both per 100 g EP and per g nitrogen. **Table IIb** lists the amino acids with their INFOODS component identifier, units and denominators. Data for amino acids are presented in Table 5 only for foods which did undergo chemical analysis by the analytical program in Kenya. For plant based foods the amino acids were analyzed using the combination of liquid chromatography with mass spectrometry after decomposition with hydrochloric acid or barium hydroxide (for tryptophan). For animal based foods the analysis were carried out using gas chromatography mass spectrometry for all amino acids, except for arginine that was analyzed using the combination of liquid chromatography with mass spectrometry.

All amino acid data were calculated in mg/g nitrogen (also referred to as amino acid profile in this document). The amino acid profiles and the total nitrogen content were then used to express the levels of individual amino acids per 100 g EP, applying the following formula:

Equation 10. *Amino acid (mg/100 g EP) = amino acid (mg/g total nitrogen) x total nitrogen (g/100 g EP)*

Fat-related compounds

Cholesterol: The content of cholesterol was determined in animal source foods by a gas chromatography-flame ionization detection (GC-FID) method (AOAC 994.10). For compiled data, the values were determined by enzymatic or chromatographic methods. The cholesterol content is assumed to be zero for raw plant foods.

Fatty acids: Total lipid consists of triglycerides, phospholipids and unsaponifiable matter. Data for fatty acids are presented on Table 4 only for foods which did undergo chemical analysis by the analytical program in Kenya. Fatty Acid profile analysis was determined with ISO 12966 Mod. GC/FID method.

Total fatty acids: In order to estimate the amount of total fatty acids in the lipid, a fatty acid conversion factor (XFA) is applied:

Equation 11. *Total fatty acids (g/100 g EP) = total fat (g/100 g EP) x XFA (g/g)*

The XFA are derived for various food products and the factors summarized by FAO/INFOODS (2012b) were applied to estimate the total fatty acids.

Fatty acids, fatty acid classes: An individual set of fatty acids (FA) is given per food, presented both per 100 g EP and per 100 g total fatty acids (%). **Table IIc** lists the fatty acids with their corresponding INFOODS component identifier (tagname), unit (U), denominators and number of significant digits.

Considerations:

- For all foods, the fatty acid classes of saturated, monounsaturated, polyunsaturated and trans fatty acids are calculated within the present dataset, i.e. their value is based on the sum of the corresponding individual fatty acids contained in the respective food. Note that monounsaturated and polyunsaturated fatty acids exclude trans-isomers.
- Values for n-3 and n-6 polyunsaturated FA are calculated within the present dataset.
- Values of individual fatty acids < 0.005 g/100 g total fatty acids or per 100 g EP are reported as tr in the respective table, while their underlying values are included in the calculations of the fatty acid classes.
- No statistics of variability are reported for fatty acids because they are based in one analytical value only.

Phytate

Phytate or inositol phosphates (IP), are saturated cyclic acids found in many plant tissues being most abundant in pulses and cereals. Since different procedures to analyse phytate are available and as each analytical method can result in a significantly different value, more than one tagname is assigned for phytate data. There are six inositol phosphate forms and they are named according to the number of phosphate groups attached to the inositol ring, i.e. IP1 to IP6. The capacity to bind cations was found to be a function of the number of phosphate groups on the myo-inositol ring. Inositol hexaphosphate (IP6), also considered as phytic acid, is the most abundant inositol phosphate and the complex formed by IP6 with minerals is stronger than the ones with IP5 and IP4 (Michaelsen et al, 2009), thus IP6 is has the highest binding capacity. The content for each IP fraction analysed by HPLC was compiled and is presented when data was available.

For most of the foods entries it was not possible to give the IP fractions. Therefore, phytate data determined by colorimetric method using direct precipitation were compiled and are presented assigned to a different tagname (PHYTCPPD).

Oxalic acid: Oxalic acid was analyzed in some plant foods using an ionic chromatography – conductivity detection (IC–CD) method.

6. FOOD AGGREGATION AND PRINCIPLES OF IMPUTATION

Data for analyzed sampled foods from different regions of Kenya are prioritized in the FCT. Other analytical data obtained from foods from Kenya (previous version of the FCT and data from scientific articles) were preferred to fill the missing data. Reference datasets were used only if no data from Kenya were available.
The decision on how to borrow values from or to include data in the aggregation was based on the following criteria:

- Food description: should be the same/similar to the food item to be included in the KFCT2018
- Data type: analytical values were preferred
- Component of interest follow the definition/expression/calculation methods selected for the KFCT2018
- Regional proximity: data from Africa was preferred if available

Note: No weighting factors considering production or market share data were applied when compiling nutrient values for a food

7. COOKED FOODS AND MIXED DISHES

Single ingredient recipes

Nutrient values of foods cooked with both moist and dry heat were calculated using yield factors and nutrient retention factors as indicated by FAO/INFOODS (2013). Different cooking procedures were applied to each raw food wherever possible. Except for cereals and pulses where the composition of tap water was considered in the recipe calculation, no other ingredient was considered for the calculation of the nutrient values for single-ingredient recipes (e.g. salt or fat).

Weight yields factors (YF) These factors describe the weight change in foods or mixed dishes due to cooking. They adjust for losses and gains of water and/or fat during preparation. Most of the YF were taken from Bergström (1994), Bognár (2002) and Matthews and Young (1975) (ANNEX 1 lists per food the yield factor used together with source). The majority of the weight change after cooking is due to loss or gain of water in the food. However, for fatty food the weight change can also be attributed to a loss of fat. Therefore, if the fat content of the food is higher than 5% the change in weight is assumed to be caused partly by water and partly by fat. In this case a proportion of fat/water loss shown in Table V were applied for cooked fatty foods.

Table V. Factors for loss of water/fat in foods

	Fat < 5% of EP	Fat 5-15% of EP	Fat > 15% of EP
Loss of fat	0%	7%	14%
Loss of water	100%	93%	86%

Source: FAO/INFOODS, 2012

The nutrient Retention Factors used for single ingredient recipes were the same applied for the mixed recipes and are detailed below.

Mixed Dishes Development - Traditional recipes from Kenya

To improve on food consumption data, nutrient value for mixed dishes was included as part of the food composition tables. This is presented as food group number fifteen. This include key recipes from Kenyan communities. A separate recipe book[1] was prepared where the recipes were quantified with ingredients and preparation methods. A total of 142 recipes were prepared and documented. The recipe book and mixed dish nutrient values in this table should be used together. This will help the user to confirm the ingrients and preparation method of the recipe in question. Further to this, more information on mixed dishes recipe is provided in the published Kenya Food Composition Tables 2018 excel file including ingredient weights and description as well as recipe weight and/or yield factor with a short recipe preparation description.

Documentation for the calculation of the mixed dishes

Mixed dishes are often not included in food composition databases. Mixed dishes are expensive to analyse as there are so many of them. It is more common to calculate the nutrient content based on the raw ingredients. However this can be difficult due to a lack of good quality data on the ingredients and proportions in commonly consumed dishes, and also a lack of yield factor data to allow the calculation.

The nutrient contents of all mixed dishes were calculated using standard food composition principles using nutrient data published in the Kenyan Food Composition Table and using yield factors measured during the mixed dish preparation.

Data collection

Data collection for the mixed dishes comprised:

- The household measure of each raw ingredient (e.g. 4 ears of corn);
- The gram measure of each raw ingredient (e.g. 1477 g of corn including cob);
- The edible portion in grams of each raw ingredient (e.g. 779 g of edible corn kernels);
- The weight of the final mixed dish after cooking;
- The weight of any inedible portion of the final mixed dish after cooking;
- Cooking time.

The data collection for mixed dishes included all ingoing ingredients, including water, seasonings and salt. Each recipe was prepared twice. Data was collected in the FAO/INFOODS template for data collection for mixed dishes, which had been used previously in the collection of recipes on complementary feeding and for the FCT for Western Africa, and was modified and expanded during the work in Kenya. Further details of development of recipes are provided in **Annex 4.**

---

[1] "GoK/FAO 2018. Kenyan food recipes. A recipe book of common mixed dishes with nutrient value, as prepared by communities"

Calculating nutrient contents

Nutrient contents of mixed dishes were calculated using the mixed method where retention factors were applied at ingredient level and yield factors applied at recipe level; this is the most accurate method of estimation[2]. If ingredients were cooked by two methods (e.g. first boiled, then sautéed) the lowest applicable retention factor was applied.

Retention factors estimate the loss of components (vitamins, minerals, etc) during cooking and allow the calculation of the nutrient content of a cooked dish from its raw ingredients. Retention factors used in the calculation of mixed dishes were the same as for the single ingredient cooked food in the Kenyan Food Composition table (Table V & VI). As each recipe was prepared twice and an average recipe calculated the nutrient content was calculated based on the average recipe.

Calculating yield factor

The yield factors for the mixed dishes were calculated from the data collected as follows:

$$\textit{Yield factor (YF)} = \frac{\textit{Weight of edible portion of final mixed dish after cooking}}{\textit{Weight of edible portion of raw ingredients before cooking}}$$

Where dishes were cooked with an inedible portion (e.g. chicken stewed with the bones), the inedible portion was separated from the final dish, weighed, and subtracted from the raw weight. The yield factor includes water used in the dish. Water that was drained and discarded was considered an ‘inedible portion’ of water. For deep fried dishes, the amount of oil absorbed by the dish was estimated by measuring the deep-frying oil before and after deep frying; this is a slight over estimation as it does not account for frying oil that evaporates during cooking.

Nutrient values and calculation assumptions

- Foods from the KFCT were matched to the ingredients according to FAO/INFOODS Guidelines for Food Matching[3].
- Some ingredients used in small quantities did not have nutrient data available (vanilla essence, food colour, tea leaves) and were excluded from calculation.
- Where foods were missing values for PHYTCPPD, values were borrowed from similar foods. These values are not published in the KFCT.
- Trace values (tr) were converted to 0 for calculation.
- Where an ingredient is missing a nutrient value, a value for this nutrient is not published for the whole mixed dish as the nutrient would be underestimated.

---

[2] FAO/INFOODS e-Learning Course on Food Composition Data. Available at http://www.fao.org/elearning/#/elc/en/course/FCD

[3] FAO/INFOODS Guidelines for Food Matching - Version 1.2 (2012) available at http://www.fao.org/docrep/017/ap805e/ap805e.pdf

- Where the original recipe data collected was not complete/appropriate, yield factors were borrowed from AUSNUT2011-2013
- Recipes were calculated using BCAREQ values for ingredients, not individual carotenes.
- The following components were calculated based on the nutrient profile of the final mixed dish, not averaged from ingredients: ENERC, CHOAVLDF, VITA_RAE, VITA, and FOLDFE.

Limitations

- Calculated nutrient contents are valid for the mixed dishes as they are published, but are not accurate for mixed dishes with different ingredients or different ingredient proportions.
- Fat in deep fried foods will be slightly over estimated as oil evaporation during cooking cannot be accounted for.

Nutrient retention factors

These factors express the nutrient content retained in the food during preparation or processing. They are defined as the coefficient expressing the preservation of nutrients in a food or dish after storage, preparation, processing, warm holding or reheating. Since there are no RF available for phytate, apparent retention factors (aRF) where calculated based on data compiled from literature that analyzed the same samples of the same foods raw and cooked. Even though the true RF is the most recommended one it was not feasible to obtain data on the fresh weights of foods before and after cooking. The aRF were calculated according to the following equation:

***Equation 12**. Apparent retention factor (aRF) = [phytate or IP6 content per 100 g of cooked food (dry basis)]/ [phytate or IP6 content per 100 g of raw food (dry basis)]*

Since there was no specific data for many foods, some RF for phytate were borrowed from similar food/ processing methods.

Retention factor assumptions

Retention factors and methodology from Vásquez-Caicedo (2008) were used.

- No retention factors were available for selenium (Se). Retention factors were borrowed from EuroFIR other minerals.
- Phytate retention factors were for the KFCT. Where retention factors were not available (predominately for fried foods) they were borrowed from boiled or stewed retention factors for the same foods. All animal products, fats and oils were assumed to have a retention factor of 1.0.
- Not all food groups had a retention factor for 'boiled, with cooking liquid'. When this retention factor was unavailable, the retention factor for 'stewed' was used to ensure mineral loss was not overestimated.
- Following EuroFIR recommendations, herbs and spices were given retention factors according to their source. Seed-type spices were given the retention factor for pulses (as recommended by EuroFIR as there are no seed/nut retention factors), leafy herbs and spices were given the retention factor for leafy vegetables.
- Water, sugar, salt, yeast and baking powder/soda were given retention factors of 1 for all nutrients.

- For ease of calculation, only one retention factor was applied to ingredients cooked by two methods. For the majority of food groups, the retention factor for cooking by moist heat resulted in the greatest losses. When there were multiple cooking methods, the appropriate moist heat cooking retention factor was applied.
- Non-grain flours were given retention factors according to their source (pulses, starchy roots and tubers etc).
- There were no retention factors for insects; retention factors for meat were used instead.

Table VI and Table VII give the retention factors applied according to the cooking methods, deriving from Vásquez-Caicedo (2008).

Table VI. Nutrient retention factors for vitamins

	Vit. A	Vit. B1	Vit. B2	Niacin	Folate	Vit. B12	Vit. C
CEREALS AND CEREAL PRODUCTS							
Rice or other grain, whole, boiled	0.90	0.50	0.75	0.75	0.70	0.75	0.70
Rice or other grain, polished, boiled (with cooking liquid)	0.95	0.75	1.00	0.95	0.80	0.95	0.70
Flour or grain product, boiled/steamed	0.90	0.80	0.90	0.90	0.70	1.00	0.80
Grain or grain product, stewed	0.95	0.75	1.00	0.95	0.80	0.95	0.70
Grain or grain product sauteed/stir fried	0.90	0.85	0.88	0.93	0.67	1.00	0.80
Flour or starch sauteed/stir fried	0.90	0.90	0.90	0.90	0.70	1.00	0.85
Flour or starch deep fried	0.90	0.90	0.90	0.90	0.70	1.00	0.85
Pasta, boiled	0.90	0.85	0.75	0.90	0.70	1.00	0.70
STARCHY ROOTS AND TUBERS							
Root, tuber and bulb vegetables, boiled	0.90	0.70	0.70	0.70	0.50	0.60	0.40
Root, tuber and bulb vegetables, stewed	0.90	0.90	0.95	0.95	0.70	0.70	0.85
Starchy root or potato, boiled	0.95	0.78	0.88	0.75	0.63	0.75	0.70
Starchy root or potato, steam	0.90	0.85	0.95	0.90	0.60	0.80	0.80
Starchy root or potato deep fried	0.95	0.83	0.98	0.95	0.78	0.85	0.93
Root, tuber and bulb vegetables sauteed/stir fried	0.90	0.90	0.95	0.95	0.70	0.90	0.85
Root, tuber and bulb vegetables deep fried	0.90	0.90	0.95	0.95	0.70	0.90	0.85
LEGUMES AND PULSES							
Pulse dish, unsoaked, boiled	1.00	0.65	0.75	0.65	0.50	1.00	0.60
Pulse dish, unsoaked, stewed	1.00	0.80	1.00	0.80	0.60	1.00	0.60
Pulse dish, soaked and boiled	1.00	0.65	0.75	0.65	0.50	1.00	0.60
Pulse dish, soaked and stewed	1.00	0.80	1.00	0.80	0.60	1.00	0.60
Pulse dish, sauteed/stir fried	0.94	0.90	0.95	0.95	0.74	0.82	0.85
Pulse dish, deep fried	0.94	0.86	0.96	0.95	0.74	0.84	0.87
VEGETABLES AND VEGETABLE PRODUCTS							
Stem, flower, fruit, corn, seed, boiled	0.90	0.65	0.65	0.65	0.50	0.70	0.65
Stem, flower, fruit, corn, seed, steam	0.90	0.80	0.90	0.80	0.60	0.70	0.75
Stem, flower, fruit, corn, seed, stewed	0.90	0.90	0.95	0.95	0.70	0.70	0.80
Stem, flower, fruit, corn, seed, cooked by dry heat	0.90	0.90	0.95	0.95	0.70	0.70	0.80
Stem, flower, fruit, corn, seed, baked or roasted	0.90	0.90	0.95	0.95	0.70	0.70	0.80
Leafy vegetables, boiled	0.90	0.65	0.65	0.65	0.50	0.60	0.40
Leafy vegetables, steam	0.90	0.80	0.90	0.80	0.60	0.60	0.55

	Vit. A	Vit. B1	Vit. B2	Niacin	Folate	Vit. B12	Vit. C
Leafy vegetables, stewed	0.90	0.90	0.95	0.95	0.70	0.70	0.60
Leafy vegetables, sauteed/stir	0.93	0.90	0.95	0.95	0.70	0.83	0.82
Leafy vegetables, deep fried	0.93	0.90	0.95	0.95	0.70	0.83	0.82
Stem, flower, fruit, corn, seed sauteed/stir fried	0.90	0.90	0.95	0.95	0.70	0.80	0.80
Stem, flower, fruit, corn, seed deep fried	0.90	0.90	0.95	0.95	0.70	0.80	0.80
Mushroom, boiled	1.00	0.65	0.65	0.65	0.50	0.70	0.65
Mushroom, stewed	1.00	0.90	0.95	0.95	0.70	0.70	0.80
MILK AND DAIRY PRODUCTS							
Milk, milk product or milk substitute, boiled	1.00	0.90	0.95	0.95	0.80	0.95	0.70
Milk or milk product, cooked with fat or oil (fried)	0.90	1.00	0.90	1.00	0.80	0.95	0.50
FISH AND SEA FOOD							
Low fat fish, cooked by moist heat (boiled, steamed, stewed)	0.90	0.75	0.70	0.70	0.70	0.80	0.80
Low fat fish, with sauce, cooked by moist heat (boiled, steamed, stewed)	0.90	0.85	1.00	0.95	0.85	0.90	0.85
Low fat fish, broiled or grilled	0.90	0.90	0.90	0.90	0.80	0.90	0.80
Low fat fish, deep fried	0.90	0.80	0.90	0.90	0.80	0.90	0.80
Fat fish, with sauce, cooked with fat or oil (fried)	0.85	0.85	1.00	0.95	0.85	0.90	0.85
Fat fish, cooked by moist heat (boiled, steamed, stewed)	0.70	0.75	0.70	0.70	0.70	0.80	0.80
Fat fish, with sauce, cooked by moist heat (boiled, steamed, stewed)	0.90	0.85	1.00	0.95	0.85	0.90	0.85
Fat fish, broiled or grilled	0.80	0.90	0.90	0.90	0.80	0.90	0.80
Sea food or related product, cooked by moist heat (boiled, steamed, stewed)	0.83	0.75	0.70	0.70	0.70	0.80	0.80
Sea food or related product with sauce, cooked by moist heat (boiled, steamed, stewed)	0.90	0.85	1.00	0.95	0.85	0.90	0.85
Sea food or related product, broiled or grilled	0.87	0.90	0.90	0.90	0.80	0.90	0.80
MEATS, POULTRY AND EGGS							
Meat and meat product, with sauce boiled, steamed	0.88	0.75	1.00	0.85	0.73	0.78	0.78
Offal, with sauce boiled, steamed	0.90	0.80	1.00	0.90	0.70	0.75	0.75
Poultry, with sauce boiled, steamed	0.80	0.67	1.00	0.80	0.67	0.70	0.80
Red meat, with sauce boiled, steamed	0.80	0.63	1.00	0.80	0.77	0.73	0.78
Beef, with sauce boiled, steamed, stewed, braised	0.80	0.60	1.00	0.80	0.80	0.70	0.75
Egg or egg product, cooked with fat or oil (fried)	0.95	0.83	0.83	0.95	0.70	0.95	0.80
Egg or egg product – omelette, sauteed/stir fried	1.00	0.95	0.95	0.95	0.70	0.95	0.80
Egg or egg product, cooked by moist heat (boiled)	0.95	0.80	0.80	0.80	0.80	0.80	0.80
Beef, boiled/steamed	0.75	0.40	0.80	0.50	0.65	0.60	1.00
Beef, broiled/grilled	0.75	0.70	0.90	0.80	0.85	0.80	0.80
Beef, stewed/braised	0.75	0.45	0.85	0.60	0.65	0.60	1.00
Red meat, deep fried	0.82	0.52	0.83	0.75	0.83	0.73	0.78
Red meat with sauce, cooked with fat or oil (fried)	0.80	0.67	1.00	0.80	0.77	0.73	1.00
Beef with sauce, cooked with fat or oil (fried)	0.80	0.60	1.00	0.80	0.80	0.70	1.00
Meat and meat product, boiled/steamed	0.75	0.58	0.84	0.59	0.61	0.60	0.70
Meat or meat product, broiled/grilled	0.80	0.71	0.91	0.82	0.75	0.74	0.78
Chicken, boiled/steamed	0.55	0.55	0.95	0.60	0.50	0.50	1.00

	Vit. A	Vit. B1	Vit. B2	Niacin	Folate	Vit. B12	Vit. C
Chicken, broiled/grilled	0.75	0.60	0.90	0.80	0.60	0.65	0.80
Chicken, sauteed/stir fried	0.75	0.70	1.00	0.80	0.50	0.65	1.00
Chicken, deep fried	0.75	0.55	0.90	0.80	0.50	0.65	0.80
Sausage or similar product, boiled/steamed/stewed	0.90	0.75	0.95	0.75	0.65	0.70	0.70
Sausage or similar product, cooked by dry heat	0.90	0.75	0.95	0.85	0.85	0.99	0.80
Offal, boiled/steamed	0.80	0.70	0.88	0.50	0.65	0.65	0.70
Pork, boiled/steamed	0.78	0.30	0.70	0.50	0.70	0.60	1.00
Pork, broiled/grilled	0.75	0.70	0.85	0.80	0.85	0.90	0.80
Lamb, mutton and game, boiled/steamed	0.80	0.40	0.55	0.50	0.60	0.60	1.00
Lamb, mutton and game, broiled/grilled	0.75	0.60	0.90	0.80	0.70	0.80	0.80
Lamb, mutton and game, baked/roasted	0.80	0.60	0.80	0.70	0.80	0.70	1.00
Poultry, boiled/steamed	0.55	0.50	0.93	0.60	0.50	0.50	1.00
Poultry, baked/roasted	0.63	0.62	0.88	0.80	0.57	0.67	0.93
Fat or oil, boiled	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Fat or oil, cooked with fat or oil (fried)	0.50	1.00	1.00	1.00	1.00	1.00	1.00

Table VII. Nutrient retention factors for minerals and phytate

	Ca	Fe	Mg	P	K	Na	Zn	Se	Phytate/ IP6*
CEREALS AND CEREAL PRODUCTS									
Rice or other grain, whole, boiled	1.00	1.00	1.00	0.95	0.80	0.80	0.95	1.00	0.51
Rice or other grain, polished, boiled (with cooking liquid)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.51
Flour or grain product, boiled/steamed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.83
Grain or grain product, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.51
Pasta, boiled	0.95	0.75	0.85	0.95	0.60	0.50	1.00	1.00	0.83
Grain or grain product, sauteed/stir fried	1.00	0.98	1.00	0.98	1.00	1.00	1.00	1	0.51
Flour or starch sauteed/stir fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.83
Flour or starch deep fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.83
STARCHY ROOTS AND TUBERS									
Root, tuber and bulb vegetables, boiled	0.95	0.75	0.60	0.90	0.45	0.55	0.75	0.90	0.90
Root, tuber and bulb vegetables, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54
Starchy root or potato, boiled	0.95	0.93	0.90	0.93	0.80	0.80	0.90	0.90	0.59
Starchy root or potato, steam	0.95	0.95	0.95	0.95	0.85	0.90	0.95	0.95	0.59
Starchy root or potato deep fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.59
Root, tuber and bulb vegetables sauteed/ stir fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.54
Root, tuber and bulb vegetables deep fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.54
LEGUMES AND PULSES									
Pulse dish, unsoaked, boiled	0.85	0.85	0.85	0.90	0.75	0.75	0.90	1.00	0.81
Pulse dish, unsoaked, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81
Pulse dish, soaked and boiled	0.85	0.85	0.85	0.90	0.75	0.75	0.90	1.00	0.67
Pulse dish, soaked and stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67
Pulse dish sauteed/stir fried	1.00	1.00	1.00	1.00	0.98	1.00	1.00	1	0.81
Pulse dish deep fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.81
Stem, flower, fruit, corn, seed, boiled	0.95	0.75	0.60	0.90	0.50	0.75	0.75	0.90	0.90

	Ca	Fe	Mg	P	K	Na	Zn	Se	Phytate/ IP6*
VEGETABLES AND VEGETABLE PRODUCTS									
Stem, flower, fruit, corn, seed, boiled	0.95	0.75	0.60	0.90	0.50	0.75	0.75	0.90	0.90
Stem, flower, fruit, corn, seed, steam	0.95	0.80	0.90	0.95	0.85	0.85	0.90	0.95	0.54
Stem, flower, fruit, corn, seed, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54
Stem, flower, fruit, corn, seed, cooked by dry heat	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Stem, flower, fruit, corn, seed, baked or roasted	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Leafy vegetables, boiled	0.95	0.75	0.60	0.90	0.50	0.75	0.75	0.90	0.90
Leafy vegetables, steam	0.95	0.80	0.90	0.95	0.85	0.85	0.90	0.95	0.54
Leafy vegetables, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54
Root, tuber and bulb vegetables, boiled	0.95	0.75	0.60	0.90	0.45	0.55	0.75	0.90	0.90
Root, tuber and bulb vegetables, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54
Mushroom, boiled	0.95	0.75	0.60	0.90	0.50	0.75	0.75	0.90	0.90
Mushroom, stewed	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.54
Stem, flower, fruit, corn, seed sauteed/stir fried	1.00	1.00	1.00	1.00	0.90	1.00	1.00	1	0.54
Stem, flower, fruit, corn, seed deep fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.54
Leafy vegetables sauteed/stir fried	1.00	1.00	1.00	1.00	0.97	1.00	1.00	1	0.54
Leafy vegetables deep fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	0.54
Fruit or fruit product, cooked with fat or oil, (fried)	0.95	1.00	1.00	1.00	0.90	1.00	1.00	1	0.54
MILK AND DAIRY PRODUCTS									
Milk, milk product or milk substitute, boiled	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Milk or milk product cooked with fat or oil (fried)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Fish and sea food									
Low fat fish, cooked by moist heat (boiled, steamed, stewed)	1.00	0.80	0.85	0.85	0.75	0.85	1.00	0.90	1.00
Low fat fish, with sauce, cooked by moist heat (boiled, steamed, stewed)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Low fat fish, broiled or grilled	1.00	0.85	0.90	0.90	0.85	0.85	1.00	1.00	1.00
Low fat fish deep fried	1.00	0.85	0.90	0.90	0.85	0.85	1.00	1	1
Fat fish, with sauce cooked with fat or oil (fried)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Fat fish, cooked by moist heat (boiled, steamed, stewed)	1.00	0.80	0.85	0.85	0.75	0.85	1.00	0.90	1.00
Fat fish, with sauce, cooked by moist heat (boiled, steamed, stewed)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fat fish, broiled or grilled	1.00	0.85	0.90	0.90	0.85	0.85	1.00	1.00	1.00
Sea food or related product, cooked by moist heat (boiled, steamed, stewed)	1.00	0.80	0.85	0.85	0.75	0.85	1.00	0.90	1.00
Sea food or related product with sauce, cooked by moist heat (boiled, steamed, stewed)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sea food or related product, broiled or grilled	1.00	0.85	0.90	0.90	0.85	0.85	1.00	1.00	1.00

	Ca	Fe	Mg	P	K	Na	Zn	Se	Phytate/ IP6*
MEATS, POULTRY AND EGGS									
Egg or egg product cooked with fat or oil (fried)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Egg or egg product - omelette sauteed/ stir fried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Fat or oil cooked with fat or oil (fried)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Egg or egg product, cooked by moist heat (boiled)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	1.00
Beef, boiled/steamed	0.80	1.00	0.60	0.65	0.50	0.45	1.00	1.00	1.00
Beef, broiled/grilled	0.90	0.95	0.85	0.90	0.85	0.85	1.00	1.00	1.00
Beef, stewed/braised	0.85	1.00	0.65	0.80	0.50	0.45	1.00	1.00	1.00
Meat and meat product, boiled/steamed	0.83	0.93	0.78	0.77	0.60	0.59	1.00	1.00	1.00
Meat or meat product, broiled/grilled	0.94	0.92	0.83	0.83	0.80	0.84	0.95	1.00	1.00
Chicken sauteed/stir fried	1.00	0.95	0.80	0.85	0.90	0.85	1.00	1	1
Chicken deep fried	1.00	0.95	0.80	0.85	0.90	0.85	1.00	1	1
Red meat deep fried	0.90	0.97	0.85	0.85	0.67	0.85	1.00	1	1
Red meat with sauce cooked with fat or oil (fried)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Beef with sauce cooked with fat or oil (fried)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1	1
Chicken, boiled/steamed	0.85	0.80	0.70	0.70	0.40	0.40	1.00	1.00	1.00
Chicken, broiled/grilled	0.95	0.90	0.75	0.80	0.80	0.80	1.00	1.00	1.00
Sausage or similar product, boiled/ steamed/stewed	0.85	0.95	1.00	1.00	0.85	0.85	1.00	1.00	1.00
Sausage or similar product, cooked by dry heat	1.00	1.00	1.00	0.95	0.85	0.90	1.00	1.00	1.00
Offal, boiled/steamed	0.80	0.95	0.8	0.70	0.60	0.60	1.00	1.00	1.00
Pork, boiled/steamed	0.80	1.00	0.60	0.60	0.50	0.45	1.00	1.00	1.00
Pork, broiled/grilled	0.75	0.80	0.95	0.90	0.85	0.90	1.00	1.00	1.00
Lamb, mutton and game, boiled/steamed	0.80	1.00	0.65	0.80	0.55	0.60	1.00	1.00	1.00
Lamb, mutton and game, broiled/grilled	1.00	0.95	0.85	0.85	0.85	0.85	1.00	1.00	1.00
Lamb, mutton and game, baked/roasted	0.90	0.95	0.85	0.85	0.80	0.85	1.00	1.00	1.00
Poultry, boiled/steamed	0.85	0.80	0.70	0.70	0.43	0.40	1.00	1.00	1.00
Poultry, baked/roasted	0.97	0.95	0.82	0.82	0.70	0.85	1.00	1.00	1.00

*Apparent retention factors calculated based on compiled data

8. DOCUMENTATION AND QUALITY CONSIDERATIONS

Documentation at food level: For all information given per food, the data sources are indicated with the respective reference ID in the source column in Annex 3, while the bibliographic information on each is given in the "*List Bibliography*".

Documentation at component level: The foods represent analytical data average values of the collected compositional data. For each value summary statistics are provided. When the number of data points was 3 or above the standard deviation (SD) was calculated. If two data points were available, only the minimum (min) and maximum (max) values were listed. For each value, the number of data points is indicated (n). Note that the value for *n* should not be misinterpreted as the number of analysis or composite samples; further, a higher number of data points compared to another food does not automatically suggest a higher validity of the content value.

The symbols and abbreviations used for component level documentation are listed in **Table VIII.**

Table VIII. Abbreviations and symbols

Symbol/Abbreviation used	Comment
tr	Value is estimated trace.
Blank	Missing value, i.e. no validated value can be reported. Wherever possible, the content has been estimated from a similar food or calculated based on various analytical data. A zero value cannot automatically be assigned.
[ ]	For alternative analytical method or lower quality. Data from non-preferred tagnames were presented only where preferred tagname data was not available.

Note: Data reported as below the limit of quantification (e.g. as in SGS) are presented as trace (more information on the limit of quantification for each component in annex 2)

To update KFCT 2018, priority was given to the analytical data from the recently analyzed foods, data from KEN93 and analytical data from literature search in research institutions. Other reference datasets were used in imputation and data borrowing. Reference datasets with high level of analytical data were used.

Data checks: Before publication, data quality was checked as per the criteria outlined in FAO/INFOODS (2012a).

9. CONCLUSION AND RECOMMENDATIONS FOR FUTURE WORK

a) In the process of development of food composition tables, it was noted that a lot of expertise is required so as to produce a quality document. Basic knowledge on food composition is accessible through the FAO/INFOODS e-Learning Course on Food Composition Data *(http://www.fao.org/infoods/infoods/training/en/)* and nutritionists are recommended to take this online course.

b) A lot of the collected university data were incomplete in terms of documentation. It would therefore be useful to introduce food composition data course in universities teaching food science, nutrition, food chemistry and other food composition related topics.

c) In some institutions, it was difficult to access food composition articles, or they were not made available to the public for use. There is need to sensitize research organizations and university on the need to disseminate research data especially on food composition. The data should be present with sufficient documentation to facilitate their use.

d) There is need for high level advocacy of FCT data at national level especially with policy makers, research institutions and food industry.

e) There is need for continued collaboration of all the stakeholders to strengthen and keep the food composition data work active. The end result should be a set up of a food composition data program with a functional data base and reliable food analysis laboratory.

FOOD COMPOSITION TABLES

ENERGY, PROXIMATES, MINERALS AND VITAMINS PER 100g EDIBLE PORTION ON FRESH WEIGHT BASIS (EP)

Table 1: Energy, proximates, minerals and vitamins

(All values expressed per 100 g of Edible Portion on Fresh Weight Basis (EP)

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
01	**CEREALS AND CEREAL PRODUCTS**									
01001	Amaranth, whole grain, dry, raw	1.00	1520	360	10	14.7	5.6	59.2	7.5	3.1
n					1	1	1		1	1
01046	Amaranth, whole grain, dry, stewed (without salt)	1.00	510	121	69.8	4.9	1.9	19.9	2.5	1.1
01002	Amaranth, whole grain, flour	1.00	1540	365	10.2	13.8	6.3	59.6	7.1	3
01003	Biscuit, Savoury	1.00	2060	492	4.5	6.6	24.9	58.9	3.3	1.9
SD or min-max							6.5		2.9-3.6	
n					1	1	3		2	1
01004	Biscuit, Sweet	1.00	1930	460	4.3	6.1	17.2	69.3	2.1	1.1
SD or min-max					1	0.3	3.2		2-2.1	
n					3	3	3		2	1
01005	Bread, Brown	1.00	1040	245	36	8	[1.5]	46.9	5.9	1.7
SD or min-max									0.3	0.5
n					1	1	1		3	4
01006	Bread, Sweet	1.00	1540	368	23.5	8.3	14.4	50.6	1.5	1.8
SD or min-max					21.5-25.5	7.1-9.4	11.6-17.1		0.7-2.3	1.1-2.4
n					2	2	2		2	2
01007	Bread, White	1.00	1050	249	36.9	7.7	1.9	48.8	3.1	1.7
SD or min-max							0.1		2.9-3.2	
n					1	1	3		2	1
01008	Breakfast cereal, flakes of corn, fortified (iron, thiamine, riboflavin, niacin and folate)	1.00	1580	372	3.5	7.5	0.7	82.6	2.95	2.8
SD or min-max					3-4	7-8	0.2		2.6-3.3	
n					2	2	3		2	1

Code	**Food name**	**Ca (mg)**	**Fe (mg)**	**Mg (mg)**	**P (mg)**	**K (mg)**	**Na (mg)**	**Zn (mg)**	**Se (mcg)**
01	**CEREALS AND CEREAL PRODUCTS**								
01001	Amaranth, whole grain, dry, raw	162	9.5	270	397	413	3	2.5	21
SD or min-max			8-11						
n		1	2	1	1	1	1	1	1
01046	Amaranth, whole, grain, dry, stewed (without salt)	56	3.2	91	133	139	3	0.85	7
01002	Amaranth, whole grain, flour	161	8.9	259	405	461	3	2.7	20
01003	Biscuit, Savoury	38	1.4	27	177	161	637	0.83	15
SD or min-max		35-41	1.1-1.8	24-30	155-198	156-166	635-639	0.81-0.84	12-17
n		2	2	2	2	2	2	2	2
01004	Biscuit, Sweet	45	1.4	19	98	158	298	0.6	10
SD or min-max		36-53	1.4-1.5	16-21	85-100	157-158	289-306	0.54-0.63	9-11
n		2	2	2	2	2	2	2	2
01005	Bread, Brown	56	2.6	58	134	191	446	1.3	13
SD or min-max		28		6		10	23	0	2
n		4	1	3	1	3	3	3	3
01006	Bread, Sweet	80	1.9	18	147	227	369	0.8	20
SD or min-max		73-86	1-2.9	11-24	94-200	103-350	228-510	0.8-84	13-26
n		2	2	2	2	2	2	2	2
01007	Bread, White	37	1.7	27	95	120	466	0.8	10
SD or min-max				27-27		120-120	462-469	0.83-0.84	10-10
n		1	1	2	1	2	2	2	2
01008	Breakfast cereal, flakes of corn, fortified (iron, thiamin, ribiflavin, niacin and folate)	3.20	10.2	13	45	110	1090	0.20	5.50
SD or min-max			7-13.3				975-1200		2-9
n		1	2	1	1	1	2	1	2

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
01	**CEREALS AND CEREAL PRODUCTS**											
01001	Amaranth, whole grain, dry, raw	0	0	0	0	0.07	0.21	0.5	82	82	0	1
SD or min-max												
n				1		1	1	1		1		1
01046	Amaranth, whole, grain, dry, stewed (without salt)	0	0	0	0	0.02	0.07	0.2	22	22	0	0
01002	Amaranth, whole, grain, flour	0	0	0	1	0.08	0.15	0.7			0	1
01003	Biscuit, Savoury	8	10	7	15	0.16	0.06	1.3	21	21	0	3
SD or min-max				0-14		0.15-0.18	0.04-0.08	0.4-2.1		13-29	0-0	0-6
n				2		2	2	2		2	2	2
01004	Biscuit, Sweet	40	42	38.5	20	0.09	0.03	0.7	23	23	0.10	7
SD or min-max				32-45		0.08-1.11	0.03-0.04	0.3-1		18-28	0.1-0.1	3-11
n				2		2	2	2		2	2	2
01005	Bread, Brown	0	0	0	0	0.22	0.01	3.4	37	37	0.05	0
SD or min-max				0				1.1			0.06	0
n				3		1	1	3		1	4	4
01006	Bread, Sweet	74	77	70	43	0.20	0.16	2.3	33	33	0.23	0.6
SD or min-max				5-135		0.02-0.38	0.08-0.23	1.2-3.5			0.11-0.35	0-1.2
n				2		2	2	2		1	2	2
01007	Bread, White	0	0	0	0	0.16	0.06	3.8	28	28	0.07	0
SD or min-max				0-0				3.7-3.9			0.06	0
n				2		1	1	2		1	3	3
01008	Breakfast cereal, flakes of corn, fortified (iron, thiamin, ribiflavin, niacin and folate)	11	21	0	128	1.00	1.50	17.7	422*	4	0	[0]
SD or min-max												0-0
n							1	1	1		1	2

*(01008) includes 246 mcg of FOLAC

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
01	**CEREALS AND CEREAL PRODUCTS**									
01009	Breakfast cereal, flakes of corn	1.00	1580	373	3.5	7.5	0.7	83	2.6	2.8
SD or min-max					3-4	7-8	0.5-0.8			
n					2	2	2		1	1
010010	Breakfast cereal, wheat biscuits, Weetabix type	1.00	1550	366	3.8	11.5	1.9	70.7	9.9	2.1
n					1	1	1		1	1
01011	Buns, Currant	1.00	1290	306	29	7	6.8	52.8	2.9	1.5
SD or min-max							5.6-8			
n					1	1	2		1	1
01012	Cake or cupcake, plain butter cake, commercial	1.00	1530	363	25.9	7.1	15.3	48.8	1.1	1.9
SD or min-max					25.6-26.2	6-8.2	15.3-15.3		0.9-1.2	1.8-1.9
n					2	2	2		2	2
01013	Cake, Fruit	1.00	1550	368	20	4	12.3	58.8	3.1	1.8
SD or min-max							1.3		0.2	0.1
n					1	1	4		3	3
01014	Cake, Sponge, homemade	1.00	1940	465	15	6.5	26.7	49.1	1.1	1.6
SD or min-max							26.4-27			
n					1	1	2		1	1
01015	Cake, Sponge, without fat	1.00	1280	304	30	10	6.3	51.2	1.2	1.3
SD or min-max							5.6-7			
n					1	1	2		1	1
01016	Cakes (Various Fancy Iced)	1.00	1730	412	15.7	13	16.8	51.5	1.1	1.9
SD or min-max					13-18.4					
n					2	1	1		1	
01017	Cornflour, from maize starch	1.00	1510	355	10.6	0.5	0.4	87.1	0.6	0.8
SD or min-max					2	0.2	0.4		0.3-0.9	0.1-1.6
n					4	4	4		2	2
01018	Maize, grain, white variety, whole, dry, raw	1.00	1450	345	13.6	7.94	4.5	63.4	9.4	1.2
n					1	1	1		1	1
01047	Maize, grain, white variety, whole, dry, boiled, drained (without salt)	1.00	469	111	72.1	2.6	1.5	20.5	3	0.4

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
01	**CEREALS AND CEREAL PRODUCTS**								
01009	Breakfast cereal, flakes of corn	3	0.4	13	45	110	1090	0.20	9
SD or min-max							975-1200		
n		1	1	1	1	1	2	1	1
01010	Breakfast cereal, wheat biscuits, Weetabix type	30	7.6	125	308	392	360	2	5.1
n		1	1	1	1	1	1	1	1
01011	Buns, Currant	90	2.5	27	100	210	100	0.6	9
n		1	1	1	1	1	1	1	1
01012	Cake or cupcake, plain butter cake, commercial	63	1	14	310	110	480	0.5	7
SD or min-max		52-73	0.8-1.2	13-14	300-320	110-110	480-480	0.47-0.5	4-9
n		2	2	2	2	2	2	2	2
01013	Cake, Fruit	75	2.0	23	106	347	170	0.5	4
SD or min-max			0.8	3	7	23		0.05	1
n		1	3	3	3	3	1	3	3
01014	Cake, Sponge, homemade	140	1.4	12	246	105	350	0.6	7
n		1	1	1	1	1	1	1	1
01015	Cake, Sponge, without fat	70	2	15	137	136	80	0.9	14
SD or min-max									
n		1	1	1	1	1	1	1	1
01016	Cakes (Various Fancy Iced)	45	1.5	10	148	147	250	0.3	3
SD or min-max									
n		1	1	1	1	1	1	1	1
01017	Cornflour, from maize starch	12	0.7	3	24	7	10	0.2	2
SD or min-max		8-15	0.6	2	16	8	1	0.24	1-3
n		2	4	3	3	3	3	3	2
01018	Maize, grain, white variety, whole, dry, raw	24	2.6	75	367	226	12	1.88	8
n		1	1	1	1	1	1	1	1
01047	Maize, grain, white variety, whole, dry, boiled, drained (without salt)	9	0.8	25	112	59	5	0.58	3

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
01	**CEREALS AND CEREAL PRODUCTS**											
01009	Breakfast cereal, flakes of corn	10	21	0	125	tr	0.08	0.8	4	4	0	[0]
SD or min-max												0-0
n						1	1	1		1		2
01010	Breakfast cereal, wheat biscuits, Weetabix type	0	0	0	0	1	1.24	11	53	53	0	0
SD or min-max							0.97-1.5					
n						1	2	1		1		1
01011	Buns, Currant	0	0	0	1	0.20	0.03	2.1	12	12	0	[0]
SD or min-max												
n						1	1	1		1	1	1
01012	Cake or cupcake, plain butter cake, commercial	50	53	46	42.5	0.06	0.14	0.7	9	8.5	0.15	0
SD or min-max				39-53		0.06-0.06	0.12-0.17	0.7-0.8		0-17	0.1-0.2	0-0
n				2		2	2	2		2	2	2
01013	Cake, Fruit	8	12	5	41	0.10	0.10	0.2	0	0	0.2	0
SD or min-max				5				0.2		0	0	0
n				3		1	1	3		3	3	4
01014	Cake, Sponge, homemade	323	338	309	173	0.04	0.13	0.5	9	9	0.9	0
SD or min-max						0-0.8	0.1-0.15					
n				1		2	2	1		1	1	1
01015	Cake, Sponge, without fat	73	73	73	tr	0.10	0.25	0.5	16	16	1.6	0
SD or min-max												0-0
n				1		1	1	1		1	1	2
01016	Cakes (Various Fancy Iced)	0	0	tr	tr	0.03	0.5	0.5	7	7	0.2	0
SD or min-max						0-0.06						
n				0		2	1	1		1	1	1
01017	Cornflour, from maize starch	0	0	0	0	0.02	0	0.2	1	1	0	0
SD or min-max				0-0		0.02	0-0	0-0.4				
n				2		4	2	2		3	3	3
01018	Maize, grain, white variety, whole, dry, raw	0	0	0	0	0.25	0.1	2	71	71	0	0
n						1	1	1		1		
01047	Maize, grain, white variety, whole, dry, boiled, drained (without salt)	0	0	0	0	0.04	0.02	0.5	16	16	0	0

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
01	**CEREALS AND CEREAL PRODUCTS**									
01048	Maize, grain, white variety, whole, dry, stewed (without salt)	1.00	469	111	72.1	2.6	1.5	20.5	3	0.4
01019	Maize, grain, yellow variety, whole, dry, raw	1.00	1430	340	12.7	8.3	3.7	62.5	11.9	1
n					1	1	1		1	1
01049	Maize, grain, yellow variety, whole, dry, boiled, drained (without salt)	1.00	463	110	71.8	2.7	1.2	20.2	3.8	0.4
01050	Maize, grain, yellow variety, whole, dry, stewed, drained (without salt)		334	79	79.6	1.9	0.9	14.5	2.8	0.3
01020	Maize meal, sifted, fortified, packaged, raw	1.00	1490	352	12.7	6.8	3	72.3	4.5	0.7
n					1	1	1		1	1
01021	Maize, White, Degermed (Muthokoi)	1.00	1430	338	13.5	7.3	1.7	71.4	3.9	2.2
SD or min-max							1.6-1.8			0.5-4
n					1	1	2		1	2
01022	Maize, whole, flour, raw	1.00	1450	345	13.6	7.9	4.5	63.4	9.4	1.2
01023	Green Maize, white, whole, grain, fresh, raw	0.68	655	157	55.1	4.1	2.5	21.4	16.1	0.8
n					1	1	1		1	1
01051	Green maize, white, whole, grain, fresh, boiled, drained (without salt)	0.69	612	146	58	3.8	2.3	20	15	0.8
01052	Green Maize, white, whole, grain, fresh, stewed (without salt)	0.62	850	203	41.7	5.3	3.2	27.8	20.9	1.1
01024	Millet, bulrush, flour	1.00	1490	354	11	10.5	5.3	61.8	8.8	2.7
01025	Millet, bulrush, grain, dry, raw	1.00	1490	354	11	9.8	5.3	62.5	8.8	2.7
01053	Millet, bulrush, whole, grain, dry, boiled, drained (without salt)	1.00	623	148	62.9	4.1	2.2	26	3.6	1.1
01054	Millet, bulrush, whole, grain, dry, stewed, drained (without salt)	1.00	623	148	62.9	4.1	2.2	26	3.6	1.1
01026	Millet, finger, flour	1.00	1290	306	11.3	7.4	2	53.3	22.6	3.5
01027	Millet, Finger, grain, dried, raw	1.00	1280	305	11.3	7.38	[1.9]	53.5	22.6	3.5
SD or min-max					1.5	1.5	0.6		6	1.8
n					19	19	18		4	19
01028	Millet Yeast (germinated millet seeds)	1.00	1270	302	12.7	7.4	[1.9]	52.7	[22.6]	2.9
SD or min-max					11.3-14.1					2.3-3.5
n					2	1	1		1	2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
01	**CEREALS AND CEREAL PRODUCTS**								
01048	Maize, grain, white variety, whole, dry, stewed (without salt)	9	0.8	25	118	73	6	0.61	3
01019	Maize, grain, yellow variety, whole, dry, raw	7	3.9	104	216	346	7	2.3	8.5
SD or min-max		3-10	3-4.8	85-123	190-241		3-11		
n		2	2	2	2	1	2	1	1
01049	Maize, grain, yellow variety, whole, dry, boiled, drained (without salt)	4	1.3	34	66	90	4	0.70	3
01050	Maize, grain, yellow variety, whole, dry, boiled (without salt, water included)	3	0.9	25	50	81	4	0.53	2
01020	Maize meal, sifted, fortified, packaged, raw	20	3.6	50	229	150	12	4.36	0
n		1	1	1	1	1	1	1	1
01021	Maize, White, Degermed (Muthokoi)	3	0.5	19	50	90	7	0.5	0
SD or min-max		3-3	0.3-0.6	10-28	40-60	70-110		0.4-0.5	0-0
n		2	2	2	2	2	1	2	2
01022	Maize, whole, flour, raw	9	2.6	110	323	258	12	1.88	9
01023	Green Maize, white, whole, grain, fresh, raw	18	1.2	39	188	188	8	1.95	5
n		1	1	1	1	1	1	1	1
01051	Green Maize, white, whole, grain, fresh, boiled, drained (without salt)	17	1.1	36	167	141	6	1.73	5
01052	Green Maize, white, whole, grain, fresh, stewed (without salt)	23	1.6	50	245	244	10	2.53	7
01024	Millet, bulrush, flour	32	32.4	84	263	291	4	4.14	34
01025	Millet, bulrush, grain, dry, raw	32	6.3	84	427	291	4	4.14	25
n		1	1	1	1	1	1	1	1
01053	Millet, bulrush, grain, dry, boiled, drained (without salt)	15	2.6	36	169	97	3	1.64	11
01054	Millet, bulrush, grain, dry, stewed (without salt)	15	2.6	36	178	122	3	1.73	11
01026	Millet, finger, flour	344	18.5	154	183	538	2	1.7	2.7
01027	Millet, Finger, Grain, Dried, Raw	344	11.3	154	183	538	2	1.7	15.3
SD or min-max		24	10.9-11.6	15	31	80	0.28	0.23	
n		4	2	4	16	4	4	4	1
01028	Millet Yeast (germinated millet seeds)	859	27.6	180	245	81	6	[1.64]	[15]
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
01	**CEREALS AND CEREAL PRODUCTS**											
01048	Maize, grain, white variety, whole, dry, stewed (without salt)	0	0	0	0	0.06	0.03	0.6	18	18	0	0
01019	Maize, grain, yellow variety, whole, dry, raw	20	40	0	241	0.5	0.12	2.2	33	33	0	0
n						1	1	1		1		1
01049	Maize, grain, yellow variety, whole, dry, boiled, drained (without salt)	6	12	0	70	0.08	0.03	0.5	7	7	0	0
01050	Maize, grain, yellow variety, whole, dry, boiled (without salt, water included)	4	9	0	53	0.09	0.03	0.5	6	6	0	0
01020	Maize meal, sifted, fortified, packaged, raw	71	71	71.4	0	0.5	0.31	3.69	523*	18	0	0
n						1	1	1		1		1
01021	Maize, White, Degermed (Muthokoi)	0	0	0	1.5	0.12	0.01	0.5	10	10	0	0
SD or min-max						0.1-0.13	0.01-0.01	0.4-0.5		9-10	0	0
n				1		2	2	2		2	3	3
01022	Maize, whole, flour, raw	0	0	0	0	0.25	0.1	2	71	71	0	0
01023	Green Maize, white, whole, grain, fresh, raw	8	16	0	98	0.18	0.1	1.55	78	78	0	0.9
n						1	1	1		1		1
01051	Green Maize, white, whole, grain, fresh, boiled, drained (without salt)	7	14	0	82	0.08	0.07	1.1	51	51	0	1
01052	Green Maize, white, whole, grain, fresh, stewed (without salt)	10	20	0	121	0.17	0.13	1.9	81	81	0	1
01024	Millet, bulrush, flour	0	0	0	0	0.27	0.17	1.5	162	162	0	3
01025	Millet, bulrush, grain, dry, raw	2	5	0	28	0.27	0.17	1.5	162	162	0	[3]
n						1	1	1		1		1
01053	Millet, bulrush, grain, dry, boiled, drained (without salt)	1	2	0	11	0.06	0.05	0.5	47	47	0	1
01054	Millet, bulrush, grain, dry, stewed (without salt)	1	2	0	11	0.08	0.07	0.6	54	54	0	1
01026	Millet, finger, flour	0	0	0	2	0.19	0.04	4.6	93	93	0	0
01027	Millet, Finger, Grain, Dried, Raw	0	0	0	2	0.19	0.04	4.6	93	93	0	0
SD or min-max						0.07	0.01					
n				1		4	4			1		1
01028	Millet Yeast (germinated millet seeds)	0	0	0	0	0.16	[0.04]	[4.5]	[93]	[90]	0	[0]
n						1	1	1		1		1

*(01020) includes 297 mcg of FOLAC

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
01	**CEREALS AND CEREAL PRODUCTS**									
01029	Oat bran, unprocessed, uncooked	1.00	1570	373	5.6	10.7	7.5	57.8	15.5	2.9
n					1	1	1		1	1
01030	Pasta, macaroni, plain, dry, raw-imported	1.00	1570	370	7.1	13.7	1.5	73.8	3.3	0.7
n					1	1	1		1	1
01065	Pasta, macaroni, plain, dry, imported, boiled, drained (without salt)	1.00	637	150	62.2	5.6	0.6	30	1.4	0.3
01066	Pasta, macaroni, plain, dry, imported boiled in recipe (without salt)		637	150	62.2	5.6	0.6	30	1.4	0.3
01031	Pasta, spaghetti, dry, raw-imported	1.00	1500	354	10.6	12.7	1.4	71	3.2	1.1
n					1	1	1		1	1
01063	Pasta, spaghetti, dry, imported, boiled, drained (without salt)	1.00	517	122	69.1	4.4	0.5	24.5	1.1	0.4
01064	Pasta, spaghetti, dry, imported, boiled in recipe (without salt)	1.00	517	122	69.1	4.4	0.5	24.5	1.1	0.4
01032	Rice, Flour	1.00	1490	352	11.9	6.0	1.1	78.4	2.1	0.5
SD or min-max					0.1	0.4	0.8-1.4			
n					3	3	2		1	1
01033	Rice, parboiled, raw	1.00	1460	345	12	7	0.5	76.2	3.7	0.6
n					1	1	1		1	1
01060	Rice, parboiled, boiled (without salt)		505	119	69.6	2.4	0.2	26.3	1.3	0.2
01034	Rice, white, milled, polished grain, dry, raw	1.00	1500	353	12.2	7.6	1	78.1	0.7	0.4
n					1	1	1		1	1
01059	Rice, white, milled, polished grain, dry, boiled (without salt)		503	119	70.5	2.6	0.3	26.2	0.2	0.2
01035	Semolina	1.00	1460	345	11.8	10.9	1.1	70.5	4.9	0.8
SD or min-max					2.1	1.3	0.3		3.2	0
n					5	4	5		4	3
01036	Scone, plain, commercial	1.00	1570	375	21	7.5	[15]	51.4	2.1	3
n					1	1	1		1	1
01037	Sorghum, Grain, Red, Dried, Raw	1.00	1420	336	11.6	9.3	3.5	59.9	14	1.8
SD or min-max					1.3	1.3				0.3
n					6	5	1		1	5

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
01	**CEREALS AND CEREAL PRODUCTS**								
01029	Oat bran, unprocessed, uncooked	54	4.4	153	491	362	12	3.2	45
n		1	1	1	1	1	1	1	1
01030	Pasta, macaroni, plain, dry, raw-imported	21	1.9	44	148	147.6	5.2	0.6	13
n		1	1	1	1	1	1	1	1
01065	Pasta, macaroni, plain, dry, imported, boiled, drained (without salt)	10	0.6	16	57	36	3	0.25	5
01066	Pasta, macaroni, plain, dry, imported, boiled in recipe (without salt)	10	0.8	18	60	60	4	0.25	5
01031	Pasta, spaghetti, dried, raw-imported	18	1.0	30	172	142	5	0.60	12
n		1	1	1	1	1	1	1	1
01063	Pasta, spaghetti, dry, imported, boiled, drained (without salt)	8	0.3	9	56	30	3	0.21	4
01064	Pasta, spaghetti, dry, inported, boiled in recipe (without salt)	8	0.3	11	59	49	4	0.21	4
01032	Rice, flour, raw	14	0.8	37	146	155	2	0.95	12
SD or min-max		9	0.9	15	58	82	3	0.8-1.1	
n		3	3	3	3	3	3	2	1
01033	Rice, parboiled, raw	9	1.7	26	125	100	6	1.06	1
n		1	1	1	1	1	1	1	1
01060	Rice, parboiled, boiled (without salt)	5	0.6	10	43	35	4	0.36	0
01034	Rice, white, milled, polished grain, dry, raw	21	0.9	23	144	59	17	1.32	1
n		1	1	1	1	1	1	1	1
01059	Rice, white, milled, polished grain, dry, boiled (without salt)	9	0.3	8	48	20	8	0.44	0
01035	Semolina, raw	16	1.6	35	102	196	2	1.17	9
SD or min-max				10		76	1	0.69	3
n		1	1	4	1	4	4	4	3
01036	Scone, plain, commercial	56	1.5	15	107	128	800	0.7	2
SD or min-max		9		0.6	1.2	1.5		0	0
n		4	1	3	3	3	1	3	3
01037	Sorghum, Grain, Red, Dried, Raw	10	3	150	296	387	6	1.97	21
SD or min-max				19	16				
n		1	1	4	3	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
01	**CEREALS AND CEREAL PRODUCTS**											
01029	Oat bran, unprocessed, uncooked	0	0	0	0	0.76	0.14	0.8	33	33	0	0
SD or min-max											0-0	0-0
n				1		1	1	1		1	2	2
01030	Pasta, macaroni, plain, dry, raw-imported	0	0	0	0	0.07	0.03	1.1	17	17	0	0
n						1	1	1		1		1
01065	Pasta, macaroni, plain, dry, imported, boiled, drained (without salt)	0	0	0	0	0.03	0.01	0.4	5	5	0	0
01066	Pasta, macaroni, plain, dry, imported, boiled in recipe (without salt)	0	0	0	0	0.02	0.01	0.4	5	5	0	0
01031	Pasta, spaghetti, dried, raw-imported	0	0	0	0	0.07	0.06	1.1	16	16	0	0
n				1		1	1	1		1		1
01063	Pasta, spaghetti, dry, imported, boiled, drained (without salt)	0	0	0	0	0.02	0.02	0.3	4	4	0	0
01064	Pasta, spaghetti, dry, inported, boiled in recipe (without salt)	0	0	0	0	0.02	0.02	0.3	4	4	0	0
01032	Rice, flour, raw	0	0	0	0	0.12	0.03	2.9	7	7	0	0
SD or min-max						0.02	0.02	1				0
n						3	3	3		2		3
01033	Rice, parboiled, raw	0	0	0	0	0.25	0.02	2.5	[10]	[10]	0	0
n						1	1	1		1		1
01060	Rice, parboiled, boiled (without salt)	0	0	0	0	0.06	0.01	0.8	3	3	0	0
01034	Rice, white, milled, polished grain, dry, raw	0	0	0	0	0.07	0.11	1.1	[9]	[9]	0	0
n				1		1	1	1		1		1
01059	Rice, white, milled, polished grain, dry, boiled (without salt)	0	0	0	0	0.02	0.04	0.4	2	2	0	0
01035	Semolina, raw	0	0	0	2	0.12	0.05	1.9	57	57	0	0
SD or min-max							0.03	1		25		0
n						1	4	4		3		4
01036	Scone, plain, commercial	95	102	87	90	0.09	0.10	0.5	19	19	0.40	0
SD or min-max						0		0		0	0	0
n				1		3	1	3		3	3	4
01037	Sorghum, Grain, Red, Dried, Raw	0	1	0	4	0.24	0.11	3.3	64	64	0	0
n						1	1	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
01	**CEREALS AND CEREAL PRODUCTS**									
01057	Sorghum, whole, grain, red, dried, boiled, drained (without salt)	1.00	590	140	63.1	3.9	1.5	24.9	5.8	0.8
01058	Sorghum, whole, grain, red, dried, stewed, drained (without salt)	1.00	590	140	63.1	3.9	1.5	24.9	5.8	0.8
01038	Sorghum, Grain, Red, Flour	1.00	1420	336	11.6	9.3	3.5	59.9	14	1.8
01039	Sorghum, grain, white, dry, raw	1.00	1440	341	11.8	10.8	3.5	60.5	11.9	1.5
n					1	1	1		1	1
01055	Sorghum, whole, grain white, dry, boiled, drained (without salt)	1.00	599	142	63.2	4.5	1.5	25.2	4.9	0.6
01056	Sorghum, whole, grain white, dry, stewed, drained (without salt)	1.00	599	142	63.2	4.5	1.5	25.2	4.9	0.6
01040	Sorghum, grain, white, flour	1.00	1440	341	11.8	10.8	3.5	60.5	11.9	1.5
01041	Teff, raw	1.00	1490	351	8.8	13.3	2.4	65.1	8.0	2.4
n					1	1	1		1	1
01042	Wheat Flour-Atta	1.00	1410	334	11.7	11.4	1.8	62.4	11.3	1.4
SD or min-max					1.5	1.1	0.3		0.1	0.2
n					4	4	4		3	3
01043	Wheat Flour (refined/fortified/sifted packaged), raw	1.00	1480	349	12.2	11.2	1.6	70.7	3.6	0.7
n					1	1	1		1	1
01044	Wheat, whole, flour, raw	1.00	1380	328	12.5	11.3	2.5	58	14	1.7
01045	Wheat, whole, grain, dry, raw	1.00	1380	328	12.5	11.6	2.5	57.8	14	1.7
n					1	1	1		1	1
01061	Wheat, whole, grain, dry, boiled (without salt)	1.00	777	184	50.8	6.5	1.4	32.5	7.9	1
01062	Wheat, whole, grain, dry, stewed (without salt)	1.00	777	184	50.8	6.5	1.4	32.5	7.9	1
02	**STARCHY ROOTS, TUBERS AND BANANAS**									
02001	Arrowroot, flour	1.00	1410	331	16.5	0.2	0.2	81.8	0.9	0.5
n					1	1	1		1	1
02002	Arrowroot, peeled, raw	0.76	461	109	70.9	3.2	0.3	22.3		1.3
SD or min-max				8.37	1					
n					4	3	1		1	1
02020	Arrowroot, peeled, boiled, drained (without salt)	1.00	461	109	70.9	3.2	0.3	22.3	2	1.3

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
01	**CEREALS AND CEREAL PRODUCTS**								
01057	Sorghum, grain, red, dry, boiled, drained (without salt)	6	1.4	63	117	129	4	0.78	9
01058	Sorghum, grain, red, dry, stewed (without salt)	6	1.4	63	123	162	4	0.82	9
01038	Sorghum, Grain, Red, Flour	10	3	150	296	387	6	1.97	12
01039	Sorghum, grain, white, dry, raw	18	6.4	101	356	233	6	1.69	21
n		1	1	1	1	1	1	1	1
01055	Sorghum, grain, white, dry, boiled, drained (without salt)	9	2.7	43	141	78	4	0.67	9
01056	Sorghum, grain, white, dry, stewed (without salt)	9	2.7	43	148	97	4	0.70	9
01040	Sorghum, grain, white, flour	18	6.4	101	356	280	4	1.69	26
001041	Teff, raw	180	7.6	184	429	427	12	3.63	4
n		1	1	1	1	1	1	1	1
01042	Wheat Flour-Atta	34	3.8	117	283	331	2	2.33	39
SD or min-max		4	0.5	13	55	31	2-3	0.89	21
n		4	4	3	3	3	2	3	3
01043	Wheat Flour (refined/fortified/sifted packaged), raw	35	5.6	31	183	129	2	0.87	0
n		1	1	1	1	1	1	1	1
01044	Wheat, whole, flour, raw	39	4.0	125	315	366	3	3	48
01045	Wheat, whole, grain, dry, raw	39	4.9	122	205	358	2	3	47
n		1	1	1	1	1	1	1	1
01061	Wheat, whole, grain, dry, boiled, drained (without salt)	23	2.8	69	109	161	2	1.43	26
01062	Wheat, whole, grain, dry, stewed (without salt)	23	2.8	69	115	201	3	1.51	26
02	**STARCHY ROOTS, TUBERS AND BANANAS**								
02001	Arrowroot, flour	33	1	4	7	11	2	0.57	0
n		1	1	1	1	1	1	1	1
02002	Arrowroot, peeled, raw	6	1.1	25	43	685	36	1	1
n		1	1	1	1	1	1	1	1
02020	Arrowroot, peeled, boiled, drained (without salt)	6	1.0	23	40	548	28	0.86	1

*(01043) includes 315 mcg of FOLAC

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
01	**CEREALS AND CEREAL PRODUCTS**											
01057	Sorghum, grain, red, dry, boiled, drained (without salt)	0	0	0	2	0.05	0.04	1.0	19	19	0	0
01058	Sorghum, grain, red, dry, stewed (without salt)	0	0	0	2	0.08	0.05	1.3	21	21	0	0
01038	Sorghum, Grain, Red, Flour	0	0	0	0	0.24	0.11	3.3			0	0
01039	Sorghum, grain, white, dry, raw	1	3	0	17	0.24	0.11	3.3	64	64	0	0
n						1	1	1		1		1
01055	Sorghum, grain, white, dry, boiled, drained (without salt)	1	1	0	6	0.05	0.04	1.0	19	19	0	0
01056	Sorghum, grain, white, dry, stewed (without salt)	1	1	0	7	0.08	0.05	1.3	21	21	0	0
01040	Sorghum, grain, white, flour	1	1	0	8.29	0.24	0.11	3.3			0	0
01041	Teff, raw	0	1	0	5	0.39	0.27	3.4	166	166	0	3
n						1	1	1		1		1
01042	Wheat Flour-Atta	0	0	0	2	0.50	0.14	3.5	80	0	0	0
SD or min-max							0.02	1.7				
n				1		1	3	3		1		1
01043	Wheat Flour (refined/fortified/sifted packaged), raw	93	93	93	2	0.91	0.57	5.9	577*	42	0.7	0
n				1		1	1	1		1		1
01044	Wheat, whole, flour, raw	0	1	0	3	0.43	0.14	2.7			0	0
01045	Wheat, whole, grain, dry, raw	0	1	0	5	0.39	0.13	2.7	57	57	0	0
n						1	1	1		1		1
01061	Wheat, whole, grain, dry, boiled, drained (without salt)	0	0	0	3	0.11	0.05	1.1	22	22	0	0
01062	Wheat, whole, grain, dry, stewed (without salt)	0	0	0	3	0.16	0.07	1.4	26	26	0	0
02	**STARCHY ROOTS, TUBERS AND BANANAS**											
02001	Arrowroot, flour	0	0	0	0	0.10	0.02	0.48	0	0	0	0
n						1	1	1		1		1
02002	Arrowroot, peeled, raw	1	3	0	17	0.22	0.09	2.56	tr	tr	0	2
n						1	1	1		1		1
02020	Arrowroot, peeled, boiled, drained (without salt)	1	3	0	16	0.17	0.08	1.9	tr	tr	0	1

*(01043) includes 315 mcg of FOLAC

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
02	**STARCHY ROOTS, TUBERS AND BANANAS**									
02003	Banana, BITA 3, dried, flour	1.00	1550	366	2.3	3.9	1.8	78.5	9.9	3.6
SD or min-max					1.5-3	3.9-3.9				3-4.2
n					2	2	1		1	2
02004	Banana, plantain, green, raw	0.50	410	97	73.6	1.4	[0.4]	20.1	3.6	0.9
SD or min-max					1.48	0	0.3-0.5			0.1
n					4	3	2		1	3
02005	Beet root, peeled, raw	0.85	184	44	86.1	2.17	0.1	6.9	3.31	1.4
SD or min-max										1.4-1.5
n					1	1	1		1	2
02021	Beet root, peeled, boiled, drained (without salt)	1.00	186	44	86	2.2	0.1	7	3.3	1.4
02023	Beet root, peeled, stewed (without salt)	1.00	174	41	86.9	2.0	0.1	6.5	3.1	1.3
02007	Cassava, root, white, peeled, raw	0.93	733	173	53.8	1.3	0.3	39.1	4.6	1
SD or min-max							0.3-0.3			
n					1	1	2		1	1
02023	Cassava, root, white, peeled, boiled, drained (without salt)	1.00	627	148	60.5	1.1	0.2	33.4	3.9	0.8
02008	Cassava, root, yellow, peeled, raw	0.95	531	126	65.7	1.6	0.2	27	4.7	0.8
n					1	1	1		1	1
02024	Cassava, root, yellow, peeled, boiled, drained (without salt)	1.00	454	107	70.7	1.4	0.2	23.1	4	0.7
02009	Potato, Irish (English), white variety, peeled, raw	0.85	447	105	72.1	2.4	0.1	22.7	1.68	1
n					1	1	1		1	1
02025	Potato, Irish (English), white variety, peeled, boiled, drained (without salt)	1.00	447	105	72.1	2.4	0.1	22.7	1.7	1
02026	Potato, Irish (English), white variety, peeled, steamed (without salt)		456	107	71.5	2.5	0.2	23.2	1.7	1
02010	Radish, round, red skin, raw	0.81	64	15	94.5	0.8	0.16	1.6	2.3	0.7
n					1	1	1		1	1
02011	Radish, long, red skin, raw	0.98	57	14	94.7	0.6	[0.1]	1.3	2.5	0.8
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
02	**STARCHY ROOTS, TUBERS AND BANANAS**								
02003	Banana, BITA 3, dried, flour	30	1.2	60	100	1030	4	0.62	4
n		1	1	1	1	1	1	1	1
02004	Banana, plantain, green, raw	7	0.8	23	29	322	10	0.23	1
SD or min-max		2-11	0.6-0.9	21-25	10	241-402	1-19	0.23-0.23	1-1
n		2	2	2	3	2	2	2	2
02005	Beet root, peeled, raw	13	0.8	11	36	298	60	0.55	0
SD or min-max		8-17	0.8-0.9		35-36	290-306		0.3-0.8	0-1
n		2	2	1	2	2	1	2	2
02021	Beet root, peeled, boiled, drained (without salt)	12	62.9	7	32	135	33	0.42	0
02022	Beet root, peeled, stewed (without salt)	12	0.8	11	34	281	56	0.52	0
02007	Cassava, root, white, peeled, raw	33	0.9	13	21	250	2	0.34	1
n		1	1	1	1	1	1	1	1
02023	Cassava, root, white, peeled, boiled, drained (without salt)	27	0.7	10	17	171	1	0.26	1
02008	Cassava, root, yellow, peeled, raw	18	0.6	9	27	290	2	0.34	1
n		1	1	1	1	1	1	1	1
02024	Cassava, root, yellow, peeled, boiled, drained (without salt)	15	0.5	7	21	198	1	0.26	1
02009	Potato, Irish (English), white variety, peeled, raw	9	1.4	19	81	645	6.46	0.32	1
n		1	1	1	1	1	1	1	1
02025	Potato, Irish (English), white variety, peeled, boiled, drained (without salt)	8	1.3	17	76	516	5	0.29	0
02026	Potato, Irish (English), white variety, peeled, steamed (without salt)	8	1.3	18	79	559	6	0.31	0
02010	Radish, round, red skin, raw	36	0.4	22	22	103	32.27	0.18	0
n		1	1	1	1	1	1	1	1
02011	Radish, long, red skin, raw	28	0.37	13	27	193	25	0.16	0
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
02	**STARCHY ROOTS, TUBERS AND BANANAS**											
02003	Banana, BITA 3, dried, flour	13	25	0	151	0.18	0.24	2.8	14	14	0	7.1
n						1	1	1		1		1
02004	Banana, plantain, green, raw	0	1	0	3	0.06	0.04	0.33	19	19	0	23.3
SD or min-max							0.02-0.06					
n						1	2	1		1		1
02005	Beet root, peeled, raw	1	2	0	10	0.01	0.02	0.3	110	110	0	5.3
SD or min-max							0.01-0.02	0.2-0.4				
n					1	1	2	2		1		1
02021	Beet root, peeled, boiled, drained (without salt)	1	1	0	7	0.01	0.01	0.2	56	56	0	2
02022	Beet root, peeled, stewed (without salt)	1	1	0	6	0.01	0.01	0.3	73	73	0	4
02007	Cassava, root, white, peeled, raw	1	1	0	8	0.23	0.01	0.4	27	27	0	38
n						1	1	1		1		1
02023	Cassava, root, white, peeled, boiled, drained (without salt)	1	1	0	6	0.15	0.01	0.3	15	15	0	23
02008	Cassava, root, yellow, peeled, raw	61	122	0	[730]	0.09	0.03	0.8	27	27	0	41
n						1	1	1		1		1
02024	Cassava, root, yellow, peeled, boiled, drained (without salt)	49	99	0	593	0.06	0.02	0.5	15	15	0	25
02009	Potato, Irish (English), white variety, peeled, raw	0	0	0	0	0.07	0.04	1.2	53	53	0	6.6
SD or min-max						0.06-0.07	0.01-0.06	1-1.4		11-96		
n						2	2	2		2		1
02025	Potato, Irish (English), white variety, peeled, boiled, drained (without salt)	0	0	0	0	0.05	0.03	0.9	34	34	0	5
02026	Potato, Irish (English), white variety, peeled, steamed (without salt)	0	0	0	0	0.06	0.04	1.1	33	33	0	5
02010	Radish, round, red skin, raw	0	0	0	1	0.02	0.03	0.3	25	25	0	21
n						1	1	1		1		1
02011	Radish, long, red skin, raw	0	0	0	2	0.06	0.02	0.3	26	26	0	17
n						1	1	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
02	**STARCHY ROOTS, TUBERS AND BANANAS**									
02012	Radish, white skin, raw	0.99	93	22	93	1.1	0.3	2.7	2.1	0.7
SD or min-max									1.8-2.4	0.6-0.8
n					1	1	1		2	2
02013	Sweet potato, brown skin, peeled, raw	0.84	428	101	72	1.7	[0.4]	20.8	4	1.2
SD or min-max					5.3	0	0.1			0.3
n					11	3	5		1	9
02027	Sweet potato, brown skin, peeled, boiled, drained (without salt)		428	101	72	1.7	0.4	20.8	4	1.2
02014	Sweetpotato, orange, biofortified, raw	0.92	325	76.9	78.7	1.9	0.1	15.6	3	0.7
n		1			1	1	1		1	1
02028	Sweetpotato, orange, biofortified, boiled, drained (without salt)		325	77	78.7	1.9	0.1	15.6	3.0	0.7
02015	Sweet potato, pink skin	0.84	349	83	76.8	1.8	[0.6]	15.6	3.9	1.3
n					1	1	1		1	1
02029	Sweet potato, pink skin, boiled, drained (without salt)		349	83	76.8	1.8	0.6	15.6	3.9	1.3
02016	Taro, peeled, raw	0.9	411	97	73	1.8	0.2	20.3	3.5	1.2
n					1	1	1		1	1
02017	Turnip, root, raw	0.77	94	22	93.1	0.7	[0.2]	3.6	1.7	0.8
n					1	1	1		1	1
02018	Yam, flour	1	1320	312	14	3.4	[0.4]	67.4	12.8	2
n					1	1	1			1
02019	Yam, white, raw	0.81	475	112	69	1.9	[0.2]	23.7	4.1	1.1
n					1	1	1		1	1
02030	Yam, white, boiled, drained (without salt)		500	118	67.4	2	0.2	24.9	4.3	1.2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
02	**STARCHY ROOTS, TUBERS AND BANANAS**								
02012	Radish, white skin, raw	40	0.4	14	20	249	26	0.34	0
SD or min-max			0.3-0.4	13-15		210-287	24-28	0.17-0.5	0-1
n		1	2	2	1	2	2	2	2
02013	Sweet potato, brown skin, peeled, raw	22	0.4	12	25	389	20	0.28	0
SD or min-max		11	0.1	3	9	76	14	0.19	
n		5	3	7	12	4	8	3	1
02027	Sweet potato, brown skin, peeled, boiled, drained (without salt)	21	0.4	10	23	311	16	0.25	0
02014	Sweetpotato, orange, biofortified, raw	27	0.5	14	33	250	10	0.5	1
n		1	1	1	1	1	1	1	1
02028	Sweetpotato, orange, biofortified, boiled, drained (without salt)	26	0.5	13	31	200	8	0.45	0
02015	Sweet potato, pink skin	14	1.0	19	61	247	11	0.14	0
SD or min-max			0.5-1.4						
n		1	2	1	1	1	1	1	1
02029	Sweet potato, pink skin, boiled, drained (without salt)	13	0.9	17	57	198	9	0.13	0
02016	Taro, peeled, raw	51	0.7	20	88	300	10	0.6	1
n		1	1	1	1	1	1	1	1
02017	Turnip, root, raw	34	0.5	11	39	320	29	0.2	1
SD or min-max		30-38			11				
n		2	1	1	3	1	1	1	1
02018	Yam, Flour	20	1.1	50	110	818	28	1	2
n		1	1	1	1	1	1	1	1
02019	Yam, white, raw	16	0.8	18	61	295	10	0.27	1
SD or min-max		15-17		15-21				0.24-0.3	
n		2	1	2	1	1	1	2	1
02030	Yam, white, boiled, drained (without salt)	16	0.8	17	60	248	8	0.26	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
02	**STARCHY ROOTS, TUBERS AND BANANAS**											
02012	Radish, white skin, raw	1.25	3	0	15	0.03	0.02	0.5	28	28	0	15
SD or min-max						0.03-0.03		0.2-0.8				
n						2	1	2		1		1
02013	Sweet potato, brown skin, peeled, raw	8	17	0	100	0.07	0.03	0.8	16	16	0	18
SD or min-max				0-0			0.02	0.2				
n				2		1	3	3		1		1
02027	Sweet potato, brown skin, peeled, boiled, drained (without salt)	8	16	0	95	0.05	0.03	0.6	10	10	0	13
02014	Sweetpotato, orange, biofortified, raw	517	1030	0	[6200]	0.03	0.05	1	11	11	0	31
n				1		1	1	1		1		1
02028	Sweetpotato, orange, biofortified, boiled, drained (without salt)	491	981	0	5890	0.02	0.04	0.8	7	7	0	22
02015	Sweet potato, pink skin	1	2	0	11	0.07	0.03	0.7	14	14	0	22
n						1	1	1		1		1
02029	Sweet potato, pink skin, boiled, drained (without salt)	1	2	0	11	0.05	0.03	0.5	9	9	0	16
02016	Taro, peeled, raw	3	5	0	[30]	0.1	0.03	0.7	22	22	0	12
SD or min-max												8-16
n					1	1	1	1		1		2
02017	Turnip, root, raw	0	0	0	0	0.04	0.04	0.7	15	15	0	23
SD or min-max												
n				1		1	1	1		1		1
02018	Yam, Flour	0	0	0	tr	tr	tr	1	43	43	0	tr
SD or min-max												
n								1		1		
02019	Yam, white, raw	0	0	0	0	0.11	0.02	0.4	16	16	0	[6]
SD or min-max								0.2-0.6		8-23		
n						1	1	2		2		1
02030	Yam, white, boiled, drained (without salt)	0	0	0	0	0.09	0.02	0.3	10	10	0	4

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
03	**LEGUMES AND PULSES**									
03001	Beans, broad, dry, raw	1.00	1280	305	10.9	25.7	1.53	35.6	22.9	3.29
SD or min-max					10.9-11	25.3-26.1			20.8-25	
n					2	2	1		2	1
03023	Beans, broad, dry, unsoaked, boiled, drained (without salt)	1.00	458	109	68.2	9.2	0.5	12.7	8.2	1.2
03024	Beans, broad, dry, unsoaked, boiled (without salt, water not discarded)	1.00	279	66	80.6	5.6	0.3	7.7	5.0	0.8
03025	Beans, broad, dry, water-soaked, boiled in different water, drained (without salt)	1.00	458	109	68.2	9.2	0.5	12.7	8.2	1.2
03026	Beans, broad, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	279	66	80.6	5.6	0.3	7.7	5.0	0.8
03002	Beans, broad, fresh, raw	1.00	345	82	75	7.2	0.5	8.7	7.1	1.3
SD or min-max					9.42	1.1				0.4
n					3	5	1		1	3
03027	Beans, broad, fresh, boiled, drained (without salt)	1.00	363	87	73.9	7.5	0.5	9.2	7.5	1.3
03003	Beans, cluster, fresh, raw	0.86	232	55	82.9	6.19	0.4	4.4	4.8	1.4
n					1	1	1		1	1
03028	Beans, cluster, fresh, boiled, drained (without salt)	1.00	244	58	82	6.5	0.4	4.6	5.1	1.4
03004	Beans, kidney, dry, raw	1.00	1280	305	12.1	20.5	2	40.6	21.2	3.6
n					1	1	1		1	1
03029	Beans, kidney, dry, unsoaked, boiled, drained (without salt)	1.00	491	117	66.3	7.9	0.8	15.5	8.1	1.4
03030	Beans, kidney, dry, unsoaked, boiled (without salt, water not discarded)	1.00	296	70	79.7	4.7	0.5	9.4	4.9	0.9
03031	Beans, kidney, dry, water-soaked, boiled in different water, drained (without salt)	1.00	491	117	66.3	7.9	0.8	15.5	8.1	1.4
03032	Beans, kidney, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	296	70	79.7	4.7	0.5	9.4	4.9	0.9
03005	Beans, lima, dry, raw	1.00	1260	299	13.6	22.4	1.63	39.7	18.2	4.5
SD or min-max						2				
n					1	3	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
03	**LEGUMES AND PULSES**								
03001	Beans, broad, dry, raw	96	5.19	135	431	1190	25	3.55	8
n		1	1	1	1	1	1	1	1
03023	Beans, broad, dry, unsoaked, boiled, drained (without salt)	31	1.6	42	138	319	9	1.14	3
03024	Beans, broad, dry, unsoaked, boiled (without salt, water not discarded)	23	1.1	30	94	259	8	0.77	2
03025	Beans, broad, dry, water-soaked, boiled in different water, drained (without salt)	31	1.6	42	138	319	9	1.14	3
03026	Beans, broad, dry, water-soaked, boiled in different water (without salt, water not discarded)	23	1.1	30	94	259	8	0.77	2
03002	Beans, broad, fresh, raw	26	1.6	29	427	275	2	1.1	8
SD or min-max		10.4	0.2		406-449	250-300	2-2	0.9-1.2	
n		3	3	1	2	2	2	2	1
03027	Beans, broad, fresh, boiled, drained (without salt)	26	1.3	18	405	145	2	0.83	8
03003	Beans, cluster, fresh, raw	121	5.6	73	50	301	4	0.61	2
n		1	1	1	1	1	1	1	1
03028	Beans, cluster, fresh, boiled, drained (without salt)	121	4.4	46	47	158	3	0.48	2
03004	Beans, kidney, dry, raw	106	6.4	103	600	872	22	2.78	4
n		1	1	1	1	1	1	1	1
03029	Beans, kidney, dry, unsoaked, boiled, drained (without salt)	36	2.1	34	207	251	8	0.96	2
03030	Beans, kidney, dry, unsoaked, boiled (without salt, water not discarded)	27	1.5	25	139	202	7	0.64	1
03031	Beans, kidney, dry, water-soaked, boiled in different water, drained (without salt)	36	2.1	34	207	251	8	0.96	2
03032	Beans, kidney, dry, water-soaked, boiled in different water (without salt, water not discarded)	27	1.5	25	139	202	7	0.64	1
03005	Beans, lima, dry, raw	64	9.9	158	387	1447	7.0	2.6	6
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
03	**LEGUMES AND PULSES**											
03001	Beans, broad, dry, raw	2	5	0	29	0.56	0.33	2.41	250	250	0	1.4
SD or min-max						0.56-0.56						
n						2	1	1		1		1
03023	Beans, broad, dry, unsoaked, boiled, drained (without salt)	1	2	0	10	0.13	0.09	0.6	45	45	0	0
03024	Beans, broad, dry, unsoaked, boiled (without salt, water not discarded)	1	1	0	6	0.1	0.07	0.4	33	33	0	0
03025	Beans, broad, dry, water-soaked, boiled in different water, drained (without salt)	1	2	0	10	0.13	0.09	0.6	45	45	0	0
03026	Beans, broad, dry, water-soaked, boiled in different water (without salt, water not discarded)	1	1	0	6	0.1	0.07	0.4	33	33	0	0
03002	Beans, broad, fresh, raw	16	32	0	195	0.12	0.14	2	284	284	0	41
SD or min-max						0.08-0.15	0.12-0.15			145-423		
n						2	2	1		2		1
03027	Beans, broad, fresh, boiled, drained (without salt)	15	31	0	184	0.08	0.09	1.4	149	149	0	28
03003	Beans, cluster, fresh, raw	20	40	0	241	0.09	0.03	0.7	[41]	[41]	0	49
n						1	1	1		1		1
03028	Beans, cluster, fresh, boiled, drained (without salt)	19	38	0	228	0.06	0.02	0.5	22	22	0	34
03004	Beans, kidney, dry, raw	1	1	0	6	0.35	0.18	2.4	272	272	0	0.3
n						1	1	1		1		1
03029	Beans, kidney, dry, unsoaked, boiled, drained (without salt)	0	0	0	2	0.09	0.05	0.6	52	52	0	0
03030	Beans, kidney, dry, unsoaked, boiled (without salt, water not discarded)	0	0	0	1	0.06	0.04	0.4	38	38	0	0
03031	Beans, kidney, dry, water-soaked, boiled in different water, drained (without salt)	0	0	0	2	0.09	0.05	0.6	52	52	0	0
03032	Beans, kidney, dry, water-soaked, boiled in different water (without salt, water not discarded)	0	0	0	1	0.06	0.04	0.4	38	38	0	0
03005	Beans, lima, dry, raw	0	0	0	0	0.53	0.16	1.5	381	381	0	1
SD or min-max												
n						1	1	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
03	**LEGUMES AND PULSES**									
03033	Beans, lima, dry, unsoaked, boiled, drained (without salt)	1.00	504	120	65.4	8.9	0.7	15.9	7.3	1.8
03034	Beans, lima, dry, unsoaked, boiled (without salt, water not discarded)	1.00	291	69	80	5.2	0.4	9.2	4.2	1.1
03035	Beans, lima, dry, water-soaked, boiled in different water, drained (without salt)	1.00	504	120	65.4	8.9	0.7	15.9	7.3	1.8
03036	Beans, lima, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	291	69	80	5.2	0.4	9.2	4.2	1.1
03006	Bean, red, fresh, raw	0.38	553	131	61.6	12.8	0.4	14.6	9.1	1.5
n					1	1	1		1	1
03007	Beans, shellie, canned, solid & liquids	1.00	112	27	90.7	1.8	0.2	2.8	3.4	1.2
n					1	1	1		1	1
03008	Bonavist, dry, raw	1.00	1350	319	10.3	23.1	[1.4]	45.3	16.4	3.4
SD or min-max					0.5	1.9	0.5			0.2
n					3	6	5		1	3
03037	Bonavist, dry, unsoaked, boiled, drained (without salt)	1.00	516	122	65.6	8.9	0.5	17.4	6.3	1.3
03038	Bonavist, dry, unsoaked, boiled (without salt, water not discarded)	1.00	430	102	71.3	7.4	0.4	14.5	5.2	1.1
03039	Bonavist, dry, water-soaked, boiled in different water, drained (without salt)	1.00	516	122	65.6	8.9	0.5	17.4	6.3	1.3
03040	Bonavist, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	326	77	78.3	5.6	0.3	11.0	4.0	0.9
03009	Bonavist, fresh, raw	1.00	521	124	63.3	5.8	0.6	18.8	10	1.5
SD or min-max						2.1-9.5				
n					1	2	1		1	1
03010	Chick peas, whole, dry, raw	1.00	1350	323	9.9	22.3	5.1	34.3	25.2	3.1
SD or min-max					0.1	2				0.1
n					3	3	1		1	3
03041	Chick peas, whole, dry, unsoaked, boiled, drained (without salt)	1.00	601	143	59.9	9.9	2.3	15.3	11.2	1.4
03042	Chick peas, whole, unsoaked, boiled (without salt, water not discarded)	1.00	430	102	71.4	7.1	1.6	10.9	8	1
03043	Chick peas, whole, dry, water-soaked, boiled in different water, drained (without salt)	1.00	601	143	59.9	9.9	2.3	15.3	11.2	1.4

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
03	**LEGUMES AND PULSES**								
03033	Beans, lima, dry, unsoaked, boiled, drained (without salt)	23	3.4	54	139	434	4	0.95	2
03034	Beans, lima, dry, unsoaked, boiled (without salt, water not discarded)	17	2.3	37	89	334	4	0.61	1
03035	Beans, lima, dry, water-soaked, boiled in different water, drained (without salt)	23	3.4	54	139	434	4	0.95	2
03036	Beans, lima, dry, water-soaked, boiled in different water (without salt, water not discarded)	17	2.3	37	89	334	4	0.61	1
03006	Bean, red, fresh, raw	12	2.4	18	100	490	3	1.00	2
n		1	1	1	1	1	1	1	1
03007	Beans, shellie, canned, solids & liquid	29	1.0	15	30	109	334	0.27	2
n		1	1	1	1	1	1	1	1
03008	Bonavist, dry, raw	59	7.13	145	334	1000	18	2.49	8
SD or min-max		8.69	1.63	60	69	969-1040			
n		3	3	3	4	2	1	1	1
03037	Bonavist, dry, unsoaked, boiled, drained (without salt)	21	2.3	48	115	289	7	0.86	3
03038	Bonavist, dry, unsoaked, boiled (without salt, water not discarded)	21	2.3	47	107	321	9	0.80	3
03039	Bonavist, dry, water-soaked, boiled in different water, drained (without salt)	21	2.3	48	115	289	7	0.86	3
03040	Bonavist, dry, water-soaked, boiled in different water (without salt, water not discarded)	16	1.7	36	81	244	7	0.60	2
03009	Bonavist, fresh, raw	31	2.5	380	118	762	6	1.12	5
n		1	1	1	1	1	1	1	1
03010	Chick peas, whole, dry, raw	235	6.8	160	284	1030	25	3.37	41
SD or min-max		28			24				
n		3	1	1	3	1	1	1	1
03041	Chick peas, whole, dry, unsoaked, boiled, drained (without salt)	90	2.6	61	114	342	10	1.35	18
03042	Chick peas, whole, unsoaked, boiled (without salt, water not discarded)	76	2.2	51	90	326	10	1.07	13
03043	Chick peas, whole, dry, water-soaked, boiled in different water, drained (without salt)	90	2.6	61	114	342	10	1.35	18

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
03	**LEGUMES AND PULSES**											
03033	Beans, lima, dry, unsoaked, boiled, drained (without salt)	0	0	0	0	0.14	0.05	0.4	76	76	0	0
03034	Beans, lima, dry, unsoaked, boiled (without salt, water not discarded)	0	0	0	0	0.10	0.04	0.3	53	53	0	0
03035	Beans, lima, dry, water-soaked, boiled in different water, drained (without salt)	0	0	0	0	0.14	0.05	0.4	76	76	0	0
03036	Beans, lima, dry, water-soaked, boiled in different water (without salt, water not discarded)	0	0	0	0	0.10	0.04	0.3	53	53	0	0
03006	Bean, red, fresh, raw	2	3	0	20	0.18	0.11	2.0	130	130	0	27
n						1	1	1		1		1
03007	Beans, shellie, canned, solids & liquid	11	23	0	137	0.03	0.05	0.21	18	18	0	3.1
n						1	1	1		1		1
03008	Bonavist, dry, raw	0	1	0	5	0.59	0.17	2.86	23	23	0	0
n						1	1	1		1		1
03037	Bonavist, dry, unsoaked, boiled, drained (without salt)	0	0	0	2	0.15	0.05	0.7	4	4	0	0
03038	Bonavist, dry, unsoaked, boiled (without salt, water not discarded)	0	0	0	2	0.15	0.05	0.7	4	4	0	0
03039	Bonavist, dry, water-soaked, boiled in different water, drained (without salt)	0	0	0	2	0.15	0.05	0.7	4	4	0	0
03040	Bonavist, dry, water-soaked, boiled in different water (without salt, water not discarded)	0	0	0	1	0.11	0.04	0.6	3	3	0	0
03009	Bonavist, fresh, raw	43	86	0	519	0.54	0.14	0.52	188	188	0	0
n						1	1	1		1	0	1
03010	Chick peas, whole, dry, raw	15	29	0	175	0.48	0.16	2.10	400	400	0	8
n						1	1	1		1		1
03041	Chick peas, whole, dry, unsoaked, boiled, drained (without salt)	6	13	0	78	0.14	0.05	0.6	89	89	0	2
03042	Chick peas, whole, unsoaked, boiled (without salt, water not discarded)	5	9	0	55	0.12	0.05	0.5	76	76	0	2
03043	Chick peas, whole, dry, water-soaked, boiled in different water, drained (without salt)	6	13	0	78	0.14	0.05	0.6	89	89	0	2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
03	**LEGUMES**									
03044	Chick peas, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	430	102	71.4	7.1	1.6	10.9	8.0	1
03011	Cowpeas, dry, raw	1.00	1320	313	12.4	25.3	1.1	43.3	14.3	3.6
SD or min-max					1.3	4	1.1-1.1			0.5
n					18	19	2		1	17
03045	Cowpeas, dry, unsoaked, boiled, drained (without salt)	1.00	495	117	67.1	9.5	0.4	16.2	5.4	1.4
03046	Cowpeas, unsoaked, boiled (without salt, water not discarded)	1.00	299	71	80.1	5.7	0.3	9.8	3.2	0.8
03047	Cowpeas, dry, water-soaked, boiled in different water, drained (without salt)	1.00	495	117	67.1	9.5	0.4	16.2	5.4	1.4
03048	Cowpeas, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	299	71	80.1	5.7	0.3	9.8	3.2	0.8
03012	Cowpeas, fresh, raw	1.00	526	125	63.8	4.6	0.6	21.5	8	1.7
SD or min-max					63.8-63.8	4.6-4.6				1.7-1.8
n					2	2	1		1	2
03049	Cowpeas, fresh, boiled, drained (without salt)	1.00	554	132	61.8	4.8	0.6	22.6	8.4	1.8
03013	Flour, soya, full fat	1.00	1830	437	7	37	20.2	22.0	9.41	4.37
n					1	1	1		1	1
03014	Flour, soya, low fat	1.00	1510	361	7	45	8.68	17.8	15.6	5.9
n					1	1	1		1	1
03015	Garden peas, fresh, raw	0.41	392	93	72.5	7.9	0.7	9.8	8	1
SD or min-max										1-1.1
n					1	1	1		1	2
03050	Garden peas, fresh, boiled, drained (without salt)		413	98	71.1	8.3	0.7	10.4	8.5	1.1
03016	Garden peas, dry, raw	1.00	1370	324	10.3	20.4	1.9	47.8	17	2.5
SD or min-max					9.3-11.3					2.4-2.7
n					2	1	1		1	2
03051	Garden peas, dry, unsoaked, boiled, drained (without salt)	1.00	506	120	66.8	7.6	0.7	17.7	6.3	1
03052	Garden peas, unsoaked, boiled (without salt, water not discarded)	1.00	321	76	78.9	4.8	0.4	11.2	4	0.6
03053	Garden peas, dry, water-soaked, boiled in different water, drained (without salt)	1.00	506	120	66.8	7.6	0.7	17.7	6.3	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
03	**LEGUMES AND PULSES**								
03044	Chick peas, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	76	2.2	51	90	326	10	1.07	13
03011	Cowpeas, dry, raw	112	5.97	322	276	1380	22	3.37	-
SD or min-max		32	2.01	285	50	643	13		
n		13	12	12	18	10	10	2	
03045	Cowpeas, dry, unsoaked, boiled, drained (without salt)	37	1.9	103	93	389	8	1.14	0
03046	Cowpeas, unsoaked, boiled (without salt, water not discarded)	27	1.4	74	62	313	7	0.76	0
03047	Cowpeas, dry, water-soaked, boiled in different water, drained (without salt)	37	1.9	103	93	389	8	1.14	0
03048	Cowpeas, dry, water-soaked, boiled in different water (without salt, water not discarded)	27	1.4	74	62	313	7	0.76	0
03012	Cowpeas, fresh, raw	200	1.7	81	84	685	6	1.61	4
n		1	1	1	1	1	1	1	1
03049	Cowpeas, fresh, boiled, drained (without salt)	200	1.4	51	80	361	5	1.27	3
03013	Flour, soya, full fat	200	6.25	421	484	2470	12.7	3.84	7
n		1	1	1	1	1	1	1	1
03014	Flour, soya, low fat	240	9.10	278	658	2040	9	4	57
n		1	1	1	1	1	1	1	1
03015	Garden peas, fresh, raw	28.2	2.63	30.15	108	249	3.66	4.65	2
SD or min-max			1.6-3.7	25-35	100-116				
n		1	2	2	2	1	1	1	1
03050	Garden peas, fresh, boiled, drained (without salt)	28	2.1	19	102	131	3	3.67	2
03016	Garden peas, dry, raw	58	4.8	117	321	933	17	3.21	50
SD or min-max		42-75	4.5-5.1	112-123	309-334	922-944	11-23	3.1-3.32	
n		2	2	2	2	2	2	2	1
03051	Garden peas, dry, unsoaked, boiled, drained (without salt)	20	1.5	38	107	259	7	1.07	19
03052	Garden peas, unsoaked, boiled (without salt, water not discarded)	16	1.1	28	76	220	6	0.75	12
03053	Garden peas, dry, water-soaked, boiled in different water, drained (without salt)	20	1.5	38	107	259	7	1.07	19

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
03	**LEGUMES AND PULSES**											
03044	Chick peas, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	5	9	0	55	0.12	0.05	0.5	76	76	0	2
03011	Cowpeas, dry, raw	2	3	0	19	0.90	0.15	2.4	439	439	0	1.5
n						1	1	1		1		1
03045	Cowpeas, dry, unsoaked, boiled, drained (without salt)	1	1	0	7	0.22	0.04	0.6	82	82	0	0
03046	Cowpeas, unsoaked, boiled (without salt, water not discarded)	0	1	0	4	0.16	0.03	0.4	60	60	0	0
03047	Cowpeas, dry, water-soaked, boiled in different water, drained (without salt)	1	1	0	7	0.22	0.04	0.6	82	82	0	0
03048	Cowpeas, dry, water-soaked, boiled in different water (without salt, water not discarded)	0	1	0	4	0.16	0.03	0.4	60	60	0	0
03012	Cowpeas, fresh, raw	65	130	0		0.14	0.10	2.3	267	267	0	4
n						1	1	1		1		1
03049	Cowpeas, fresh, boiled, drained (without salt)	62	31			0.10	0.07	1.6	141	141	0	3
03013	Flour, soya, full fat	6	12	0	71	0.8	0.3	4.2	338	338	0	0
n						1	1	1		1		1
03014	Flour, soya, low fat	2	4	0	23	0.80	0.40	2.9	282	282	0	0
n						1	1	1		1		1
03015	Garden peas, fresh, raw	30	60	0	363	0.29	0.13	2.3	216	216	0	38.4
n						1	1	1		1		1
03050	Garden peas, fresh, boiled, drained (without salt)	29	57	0	343	0.20	0.09	1.6	113	113	0	26.3
03016	Garden peas, dry, raw	5	11	0	64	0.88	0.17	2.6	[110]	[110]	0	5
SD or min-max								2.4-2.7				
n						1	1	2		1		1
03051	Garden peas, dry, unsoaked, boiled, drained (without salt)	2	4	0	24	0.21	0.05	0.6	20	20	0	1
03052	Garden peas, unsoaked, boiled (without salt, water not discarded)	1	3	0	15	0.17	0.04	0.5	16	16	0	1
03053	Garden peas, dry, water-soaked, boiled in different water, drained (without salt)	2	4	0	24	0.21	0.05	0.6	20	20	0	1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
03	**LEGUMES AND PULSES**									
03054	Garden peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	321	76	78.9	4.8	0.4	11.2	4	0.6
03017	Gram, black, dry, raw	1.00	1330	316	11.4	24.6	1.7	42.5	16.3	3.51
n					1	1	1		1	1
03055	Gram, black, dry, unsoaked, boiled, drained (without salt)	1.00	433	103	71.2	8	0.6	13.8	5.3	1.2
03056	Gram, black, dry, unsoaked, boiled (without salt, water not discarded)	1.00	290	69	80.7	5.3	0.4	9.2	3.5	0.8
03057	Gram, black, dry, water-soaked, boiled in different water, drained (without salt)	1.00	433	103	71.2	8.0	0.6	13.8	5.3	1.2
03058	Gram, black, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	290	69	80.7	5.3	0.4	9.2	3.5	0.8
03018	Gram, Flour	1.00	1490	353	9.6	22.7	5.4	48.5	10.1	3.75
SD or min-max					9-10.2					
n					2	1	1		1	1
03019	Gram, green, dry, raw	1.00	1310	311	11.6	27.2	[1.7]	38.4	16.7	4.4
SD or min-max					1.3	6	0.7			2.08
n					13	14	13		1	14
03059	Gram, green, dry, unsoaked, boiled, drained (without salt)	1.00	487	116	67.1	10.1	0.6	14.3	6.2	1.7
03060	Gram, green, dry, unsoaked, boiled (without salt, water not discarded)	1.00	309	73	79.2	6.4	0.4	9.0	3.9	1.1
03061	Gram, green, dry, water-soaked, boiled in different water, drained (without salt)	1.00	487	116	67.1	10.1	0.6	14.3	6.2	1.7
03062	Gram, green, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	309	73	79.2	6.4	0.4	9.0	3.9	1.1
03020	Lentils, whole, dry, raw	1.00	1340	318	9.95	28.4	0.6	41.3	16.8	3
SD or min-max					9.9-1	27.4-29.4				2.9-3
n					2	2	1		1	2
03063	Lentils, whole, dry, unsoaked, boiled, drained (without salt)	1.00	506	120	66.0	10.7	0.2	15.6	6.3	1.1
03064	Lentils, whole, unsoaked, boiled (without salt, water not discarded)	1.00	316	75	78.8	6.7	0.2	9.7	4	0.7
03065	Lentils, whole, dry, water-soaked, boiled in different water, drained (without salt)	1.00	506	120	66.0	10.7	0.2	15.6	6.3	1.1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
03	**LEGUMES AND PULSES**								
03054	Garden peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	16	1.1	28	76	220	6	0.75	12
03017	Gram, black, dry, raw	84	6	113	335	718	14	2.33	43
n		1	1	1	1	1	1	1	1
03055	Gram, black, dry, unsoaked, boiled, drained (without salt)	25	1.6	32	98	175	5	0.68	14
03056	Gram, black, dry, unsoaked, boiled (without salt, water not discarded)	20	1.3	25	73	157	5	0.51	9
03057	Gram, black, dry, water-soaked, boiled in different water, drained (without salt)	25	1.6	32	98	175	5	0.68	14
03058	Gram, black, dry, water-soaked, boiled in different water (without salt, water not discarded)	20	1.3	25	73	157	5	0.51	9
03018	Gram, Flour, raw	58	5.2	62	170	297	2	1.50	4
SD or min-max			2.6-7.7						
n		1	2	1	1	1	1	1	1
03019	Gram, green, dry, raw	151	7.6	208	280	989	26	2.62	23
SD or min-max		67	2.74	73	86	211	11		
n		9	10	11	13	8	13	1	1
03059	Gram, green, dry, unsoaked, boiled, drained (without salt)	49	2.4	66	94	276	9	0.88	9
03060	Gram, green, dry, unsoaked, boiled (without salt, water not discarded)	38	1.8	50	66	233	8	0.62	6
03061	Gram, green, dry, water-soaked, boiled in different water, drained (without salt)	49	2.4	66	94	276	9	0.88	9
03062	Gram, green, dry, water-soaked, boiled in different water (without salt, water not discarded)	38	1.8	50	66	233	8	0.62	6
03020	Lentils, whole, dry, raw	83	7.4	101	308	629	11	4	33
SD or min-max		64-101	7-7.8		298-317	629-629			
n		2	2	1	2	2	1	1	1
03063	Lentils, whole, dry, unsoaked, boiled, drained (without salt)	28	2.4	33	104	178	5	1.22	13
03064	Lentils, whole, unsoaked, boiled (without salt, water not discarded)	21	1.7	24	72	148	5	0.85	8
03065	Lentils, whole, unsoaked, boiled (without salt, water not discarded)	21	1.7	24	72	148	5	0.85	8

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
03	**LEGUMES AND PULSES**											
03054	Garden peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	1	3	0	15	0.17	0.04	0.5	16	16	0	1
03017	Gram, black, dry, raw	12	23	0	140	0.31	0.11	1.8	346	346	0	3
n						1	1	1		1		1
03055	Gram, black, dry, unsoaked, boiled, drained (without salt)	4	8	0	46	0.07	0.03	0.4	56	56	0	1
03056	Gram, black, dry, unsoaked, boiled (without salt, water not discarded)	3	5	0	31	0.05	0.02	0.3	45	45	0	0
03057	Gram, black, dry, water-soaked, boiled in different water, drained (without salt)	4	8	0	46	0.07	0.03	0.4	56	56	0	1
03058	Gram, black, dry, water-soaked, boiled in different water (without salt, water not discarded)	3	5	0	31	0.05	0.02	0.3	45	45	0	0
03018	Gram, Flour	3	5	0	32	0.45	0.17	1.9	193	193	0	0
n						1	1	1		0		0
03019	Gram, green, dry, raw	9	18	0	111	0.52	0.2	2.2	607	607	0	3.0
SD or min-max								2.2-2.2				
n				1		1	1	2		1		1
03059	Gram, green, dry, unsoaked, boiled, drained (without salt)	3	7	0	41	0.13	0.06	0.5	113	113	0	1
03060	Gram, green, dry, unsoaked, boiled (without salt, water not discarded)	2	4	0	26	0.1	0.05	0.4	86	86	0	0
03061	Gram, green, dry, water-soaked, boiled in different water, drained (without salt)	3	7	0	41	0.13	0.06	0.5	113	113	0	1
03062	Gram, green, dry, water-soaked, boiled in different water (without salt, water not discarded)	2	4	0	26	0.1	0.05	0.4	86	86	0	0
03020	Lentils, whole, dry, raw	1	2	0	10	0.4	0.19	2.54	[132]	[132]	0	6.8
n						1	1	1		1		1
03063	Lentils, whole, dry, unsoaked, boiled, drained (without salt)	0	1	0	4	0.1	0.05	0.6	25	25	0	2
03064	Lentils, whole, unsoaked, boiled (without salt, water not discarded)	0	0	0	2	0.08	0.04	0.5	19	19	0	1
03065	Lentils, whole, dry, water-soaked, boiled in different water, drained (without salt)	0	1	0	4	0.1	0.05	0.6	25	25	0	2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
03	**LEGUMES AND PULSES**									
03066	Lentils, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	316	75	78.8	6.7	0.2	9.7	4	0.7
03021	Pigeon peas, dry, raw	1.00	1272	303	12.1	20.9	[2.1]	38.9	22.1	3.8
SD or min-max					2.1	4.2	0.8			0.5
n					13	14	12		1	12
03067	Pigeon peas, dry, unsoaked, boiled, drained (without salt)	1.00	553	132	61.8	9.1	0.9	16.9	9.6	1.7
03068	Pigeon peas, dry, unsoaked, boiled (without salt, water not discarded)	1.00	398	95	72.5	6.5	0.7	12.1	6.9	1.2
03069	Pigeon peas, dry, water-soaked, boiled in different water, drained (without salt)	1.00	553	132	61.8	9.1	0.9	16.9	9.6	1.7
03070	Pigeon peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	1.00	398	95	72.5	6.5	0.7	12.1	6.9	1.2
03022	Soybean, dry, raw	1.00	1605	386	12.7	34	[19.1]	9.7	19.3	5.2
SD or min-max					3	2.4	0.9			0.7
n					4	5	5		1	4
03071	Soybean, dry, unsoaked, boiled, drained (without salt)	1.00	661	159	64	14	7.9	4	7.9	2.2
03072	Soybean, dry, water-soaked, boiled in different water, drained (without salt)	1.00	661	159	64	14	7.9	4	7.9	2.2
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04001	Amaranth, leaves, picked, raw	0.59	150	36	84.6	3.7	[0.2]	1.3	7.2	3.1
n					1	1	1		1	1
04039	Amaranth, leaves, picked, boiled, drained (without salt)	1.00	158	38	83.8	3.9	0.3	1.3	7.6	3.2
04040	Amaranth, leaves, picked, stewed (without salt)		186	45	81	4.6	0.3	1.5	8.9	3.8
04002	Bitter gourd, whole, different varieties, raw	0.97	135	32	89.6	1.5	[0.2]	4.2	3.7	0.8
SD or min-max					4	0.1	0		0.2	0.8-0.9
n					3	4	3		3	2
04041	Bitter gourd, whole, different varieties, boiled, drained (without salt)	1.00	150	36	88.4	1.7	0.3	4.6	4.1	0.9
04003	Black (African) nightshade, indigenous, leaves, picked, raw	0.52	127	31	88.6	3.8	[0.1]	1.3	4.3	1.8
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
03	**LEGUMES AND PULSES**								
03066	Lentils, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	21	1.7	24	72	148	5	0.85	8
03021	Pigeon peas, dry, raw	172	5.4	128	272	1200	21	2.9	15
SD or min-max		76		49.7	58	212	11		
n		11	1	14	14	13	12	1	1
03067	Pigeon peas, dry, unsoaked, boiled, drained (without salt)	65	2.0	48	106	391	8	1.13	7
03068	Pigeon peas, dry, unsoaked, boiled (without salt, water not discarded)	56	1.7	41	85	375	8	0.91	5
03069	Pigeon peas, dry, water-soaked, boiled in different water, drained (without salt)	65	2.0	48	106	391	8	1.13	7
03070	Pigeon peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	56	1.7	41	85	375	8	0.91	5
03022	Soybean, dry, raw	228	7.3	203	384	1730	7	3.83	22
SD or min-max		141	1.8	71	226		5		
n		5	4	4	4	1	3	1	1
03071	Soybean, dry, unsoaked, boiled, drained (without salt)	81	2.5	72	142	533	4	1.42	9
03072	Soybean, dry, water-soaked, boiled in different water, drained (without salt)	81	2.5	72	142	533	4	1.42	9
04	**VEGETABLE AND VEGETABLE PROCUCTS**								
04001	Amaranth, leaves, picked, raw	280	6.8	122	89	597	18	0.92	22
SD or min-max		150-410	4.6-8.9		75-103				
n		2	2	1	2	1	1	1	1
04039	Amaranth, leaves, picked, boiled, drained (without salt)	280	5.3	77	84	314	14	0.73	20
04040	Amaranth, leaves, picked, stewed (without salt)	346	8.3	151	110	737	22	1.14	27
04002	Bitter gourd, whole, different varieties, raw	22	1.4	20	51	210	16	0.37	5
SD or min-max		20-25	0.3	14	19	93	2	0.06	1
n		2	6	3	3	3	3	3	3
04041	Bitter gourd, whole, different varieties, boiled, drained (without salt)	23	1.2	13	51	117	14	0.31	5
04003	Black (African) nightshade, indigenous, leaves, picked, raw	100	8.6	41	68	421	10	0.65	1
SD or min-max		78-123	7.5-9.8		55-80				
n		2	2	1	2	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
03	**LEGUMES AND PULSES**											
03066	Lentils, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	0	0	0	2	0.08	0.04	0.5	19	19	0	1
03021	Pigeon peas, dry, raw	19	38	0	230	0.72	0.14	2.34	340	340	0	1.5
n						1	1	1		1		1
03067	Pigeon peas, dry, unsoaked, boiled, drained (without salt)	8	17	0	100	0.2	0.05	0.7	74	74	0	0
03068	Pigeon peas, dry, unsoaked, boiled (without salt, water not discarded)	6	12	0	72	0.18	0.04	0.6	64	64	0	0
03069	Pigeon peas, dry, water-soaked, boiled in different water, drained (without salt)	8	17	0	100	0.2	0.05	0.7	74	74	0	0
03070	Pigeon peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	6	12	0	72	0.18	0.04	0.6	64	64	0	0
03022	Soybean, dry, raw	0	1	0	5	0.73	0.15	2.59	359	359	0	0
SD or min-max												
n						1	1	1		1		1
03071	Soybean, dry, unsoaked, boiled, drained (without salt)	0	0	0	2	0.19	0.05	0.7	74	74	0	0
03072	Soybean, dry, water-soaked, boiled in different water, drained (without salt)	0	0	0	2	0.19	0.05	0.7	74	74	0	0
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04001	Amaranth, leaves, picked, raw	326	652	0	3913	0.03	0.22	0.69	64	64	0	77
n						1	1	1		1		1
04039	Amaranth, leaves, picked, boiled, drained (without salt)	309	618	0	3707	0.02	0.15	0.5	34	34	0	33
04040	Amaranth, leaves, picked, stewed (without salt)	362	725	0	4347	0.03	0.26	0.8	55	55	0	57
04002	Bitter gourd, whole, different varieties, raw	11	21	0	126	0.07	0.04	0.3	45	45	0	60
SD or min-max							0	0.02				19
n						1	3	3		1		4
04041	Bitter gourd, whole, different varieties, boiled, drained (without salt)	11	21	0	126	0.05	0.03	0.2	25	25	0	43
04003	Black (African) nightshade, indigenous, leaves, picked, raw	2	4	0	24	0.06	0.32	1.1	404	404	0	[36]
SD or min-max												11.7
n						1	1	1		1		3

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04042	Black (African) nightshade, indigenous, leaves, picked, boiled, drained (without salt)	1.00	121	29	89.1	3.6	0.1	1.3	4.1	1.7
04004	Broccoli, tops and stems, raw	0.60	143	34	89.0	3.3	0.3	2.7	3.7	1
n					1	1	1		1	1
04044	Broccoli, tops and stems, boiled, drained (without salt)	1.00	129	31	90.1	3	0.3	2.4	3.3	0.9
04045	Broccoli, tops and stems, steamed (without salt)	1.00	137	33	89.4	3.2	0.3	2.6	3.6	1
04005	Cabbage, leaf head, Chinese, raw	0.92	40	10	97	0.9	0.3	0.4	1.1	0.4
SD or min-max							0.1-0.4			
n					1	1	2		1	1
04046	Cabbage, leaf head, Chinese, boiled, drained (without salt)	1.00	41	10	96.9	0.9	0.3	0.4	1.1	0.4
04047	Cabbage, leaf head, Chinese, steamed (without salt)	1.00	41	10	96.9	0.9	0.3	0.4	1.1	0.4
04006	Cabbage, leaf head, red raw	0.84	110	26	91.1	1.3	[0.2]	3.1	3.4	0.9
n					1	1	1		1	1
04048	Cabbage, leaf head, red, boiled, drained (without salt)	1.00	113	27	90.9	1.3	0.2	3.2	3.5	0.9
04049	Cabbage, leaf head, red, stewed (without salt)	1.00	102	24	91.7	1.2	0.2	2.9	3.1	0.8
04007	Cabbage, leaf head, white, raw	0.78	76	18	93.8	1.1	[0.1]	2.2	2.2	0.7
n					1	1	1		1	1
04050	Cabbage, leaf head, white, boiled, drained (without salt)	1.00	78	19	93.6	1.1	0.1	2.2	2.3	0.7
04051	Cabbage, leaf head, white, stewed (without salt)	1.00	82	20	93.3	1.2	0.1	2.4	2.4	0.7
04008	Capsicum (sweet peper), green, raw	0.40	95	23	93.3	1.5	0.1	2.9	2	0.2
n					1	1	1		1	1
04052	Capsicum (sweet peper), green, boiled, drained (without salt)	1.00	109	26	92.3	1.7	0.1	3.3	2.3	0.2
04053	Capsicum (sweet peper), green, grilled (without salt and fat)	1.00	102	24	92.8	1.6	0.1	3.1	2.2	0.2
04054	Capsicum (sweet peper), green, baked (without salt)	1.00	98	23	93	1.6	0.1	3	2.1	0.2
04009	Capsicum (sweet peper), red, raw	0.40	110	26	92.4	1.7	0.2	3.5	1.8	0.4
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
04	**VEGETABLES AND VEGETABLE PRODUCTS**								
04042	Black (African) nightshade, indigenous, leaves, picked, boiled, drained (without salt)	91	6.2	24	58	200	7	0.46	1
04004	Broccoli, tops and stems, raw	66	0.8	21	75	336	22	1	1
SD or min-max		32-100							
n		2	1	1	1	1	1	1	1
04044	Broccoli, tops and stems, boiled, drained (without salt)	56	0.6	11	61	151	15	0.41	0
04045	Broccoli, tops and stems, steamed (without salt)	60	0.6	18	69	275	18	0.52	0
04005	Cabbage, leaf head, Chinese, raw	36	1.4	10	40	250	16	0	1
n		1	1	1	1	1	1	1	1
04046	Cabbage, leaf head, Chinese, boiled, drained (without salt)	35	1.1	6	37	128	12	0.15	0
04047	Cabbage, leaf head, Chinese, steamed (without salt)	35	1.2	9	39	217	14	0.18	0
04006	Cabbage, leaf head, red raw	45	0.7	29	14	241	16	0.3	1
n		1	1	1	1	1	1	1	1
04048	Cabbage, leaf head, red, boiled, drained (without salt)	44	0.5	18	13	123	12	0.23	1
04049	Cabbage, leaf head, red, stewed (without salt)	42	0.7	27	13	223	15	0.28	1
04007	Cabbage, leaf head, white, raw	47	0.5	9	40	313	37	0.2	1
SD or min-max				9-10	4		34-40		
n		1	1	2	3	1	2	1	1
04050	Cabbage, leaf head, white, boiled, drained (without salt)	45	0.4	6	36	159	29	0.18	0
04051	Cabbage, leaf head, white, stewed (without salt)	50	0.5	10	43	336	40	0.25	1
04008	Capsicum (sweet peper), green, raw	8	0.5	10	17	151	2	0.18	0
n		1	1	1	1	1	1	1	1
04052	Capsicum (sweet peper), green, boiled, drained (without salt)	9	0.5	7	18	87	2	0.16	0
04053	Capsicum (sweet peper), green, grilled (without salt and fat)	9	0.6	11	18	162	2	0.19	0
04054	Capsicum (sweet peper), green, baked (without salt)	8	0.6	10	18	157	2	0.19	0
04009	Capsicum (sweet peper), red, raw	4	0.3	6	24	174	2	0.2	1
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04042	Black (African) nightshade, indigenous, leaves, picked, boiled, drained (without salt)	2	3	0	20	0.04	0.2	0.7	192	192	0	14
04004	Broccoli, tops and stems, raw	25	51	0	303	0.10	0.22	0.5	48	48	0	103
SD or min-max												100-106
n						1	1	1		1		2
04044	Broccoli, tops and stems, boiled, drained (without salt)	20	41	0	246	0.06	0.13	0.3	22	22	0	60
04045	Broccoli, tops and stems, steamed (without salt)	22	44	0	262	0.08	0.19	0.4	28	28	0	74
04005	Cabbage, leaf head, Chinese, raw	16	32	0	190	0.03	0.04	0.4	170	170	0	20
n						1	1	1		1		1
04046	Cabbage, leaf head, Chinese, boiled, drained (without salt)	15	29	0	174	0.02	0.03	0.3	87	87	0	8
04047	Cabbage, leaf head, Chinese, steamed (without salt)	15	29	0	174	0.02	0.04	0.3	104	104	0	11
04006	Cabbage, leaf head, red raw	1	2	0	10	0.09	0.13	0.5	57	57	0	69
n				1		1	1	1		1		1
04048	Cabbage, leaf head, red, boiled, drained (without salt)	1	2	0	9	0.06	0.09	0.3	29	29	0	28
04049	Cabbage, leaf head, red, stewed (without salt)	1	1	0	8	0.08	0.11	0.4	37	37	0	38
04007	Cabbage, leaf head, white, raw	tr	tr	0	tr	0.04	0.04	0.4	15	15	0	50
SD or min-max												45-54
n						1	1	1		1		2
04050	Cabbage, leaf head, white, boiled, drained (without salt)	tr	tr	0	tr	0.03	0.03	0.3	8	8	0	20
04051	Cabbage, leaf head, white, stewed (without salt)	tr	tr	0	tr	0.04	0.04	0.4	11	11	0	32
04008	Capsicum (sweet peper), green, raw	27	55	0	328	0.03	0.03	0.50	8	8	0	115
SD or min-max												90-140
n						1	1	1		1		2
04052	Capsicum (sweet peper), green, boiled, drained (without salt)	28	57	0	339	0.02	0.02	0.4	5	5	0	86
04053	Capsicum (sweet peper), green, grilled (without salt and fat)	26	53	0	317	0.03	0.03	0.5	6	6	0	99
04054	Capsicum (sweet peper), green, baked (without salt)	26	51	0	308	0.03	0.03	0.5	6	6	0	96
04009	Capsicum (sweet peper), red, raw	21	41	0	246	0.04	0.05	1	52	52	0	156
SD or min-max												140-172
n						1	1	1		1		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04055	Capsicum (sweet peper), red, boiled, drained (without salt)	1.00	127	30	91.3	2	0.2	4.0	2.1	0.5
04056	Capsicum (sweet peper), red, grilled (without salt and fat)	1.00	118	28	91.8	1.8	0.2	3.8	1.9	0.4
04057	Capsicum (sweet peper), red, baked (without salt)	1.00	115	27	92.1	1.8	0.2	3.6	1.9	0.4
04010	Capsicum (sweet peper), yellow, raw	0.46	86	21	93.4	1.4	0.2	2.3	2.2	0.6
SD or min-max										0.5-0.7
n					1	1	1		1	2
04058	Capsicum (sweet peper), yellow, boiled, drained (without salt)	1.00	99	24	92.4	1.6	0.2	2.6	2.5	0.7
04059	Capsicum (sweet peper), yellow, grilled (without salt and fat)	1.00	93	22	92.9	1.5	0.2	2.4	2.4	0.7
04060	Capsicum (sweet peper), yellow, baked (without salt)	1.00	90	22	93.1	1.4	0.2	2.4	2.3	0.6
04011	Carrot, peeled, raw	0.83	124	30	90.6	0.7	[0.2]	4.5	3.2	0.6
n					1	1	1		1	1
04061	Carrot, peeled, boiled, drained (without salt)	1.00	132	32	90	0.8	0.3	4.8	3.4	0.7
04062	Carrot, peeled, stewed (without salt)	1.00	129	31	90.2	0.8	0.2	4.7	3.4	0.7
04012	Cauliflower, tops and stems, raw	0.7	79	19	93.2	2	0.2	0.9	2.8	0.9
SD or min-max					1.7	0				
n					3	3	1		1	1
04063	Cauliflower, tops and stems, boiled, drained (without salt)	1.00	79	19	93.2	2.0	0.2	0.9	2.8	0.9
04013	Celery, stalk, raw	0.65	114	27	90.9	0.6	0.1	5.3	1.4	1.8
SD or min-max										1.4-2.1
n					2	1	1		1	2
04064	Celery, stalk, boiled, drained (without salt)	1.00	127	30	89.9	0.7	0.1	5.8	1.6	1.9
04014	Courgette, green, unpeeled, raw	0.93	78	19	94.8	0.9	0.3	2.5	1.1	0.4
n					1	1	1		1	1
04065	Courgette, green, unpeeled, boiled, drained (without salt)	1.00	86	21	94.2	1	0.3	2.8	1.2	0.4
04015	Cowpea, leaves, picked, raw	0.59	123	30	88.7	3.4	[0.4]	0.7	4.9	1.9
n					1	1	1		1	1
04066	Cowpea, leaves, picked, boiled, drained (without salt)	1.00	117	28	89.2	3.2	0.4	0.6	4.7	1.8

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
04	**VEGETABLES AND VEGETABLE PRODUCTS**								
04055	Capsicum (sweet peper), red, boiled, drained (without salt)	4	0.3	4	25	100	2	0.17	1
04056	Capsicum (sweet peper), red, grilled (without salt and fat)	4	0.3	6	26	187	2	0.22	1
04057	Capsicum (sweet peper), red, baked (without salt)	4	0.3	6	25	181	2	0.21	1
04010	Capsicum (sweet peper), yellow, raw	19	1	17	43	242	2	0	0
n		1	1	1	1	1	1	1	1
04058	Capsicum (sweet peper), yellow, boiled, drained (without salt)	21	0.6	12	45	139	1	0.22	0
04059	Capsicum (sweet peper), yellow, grilled (without salt and fat)	21	0.7	19	47	260	2	0.28	0
04060	Capsicum (sweet peper), yellow, baked (without salt)	20	0.7	18	45	252	2	0.27	0
04011	Carrot, peeled, raw	33	0.6	17	25	251	35	0.14	0
SD or min-max							12		
n		1	1	1	1	1	3	1	1
04061	Carrot, peeled, boiled, drained (without salt)	34	0.5	11	24	120	21	0.11	0
04062	Carrot, peeled, stewed (without salt)	35	0.6	17	26	261	37	0.14	0
04012	Cauliflower, tops and stems, raw	17	0.8	11	49	292	30	0	1
SD or min-max			0.5-1.2	7-14					
n		1	2	2	1	1	1	1	1
04063	Cauliflower, tops and stems, boiled, drained (without salt)	16	0.6	6	44	146	23	0.19	0
04013	Celery, stalk, raw	70	1	19	50	267	28	0.21	2
SD or min-max		19	0.6-1.3				16-40		
n		3	2	1	1	1	2	1	1
04064	Celery, stalk, boiled, drained (without salt)	74	0.8	13	50	148	23	0.18	2
04014	Courgette, green, unpeeled, raw	18	0.5	16	34	188	1	0.33	1
n		1	1	1	1	1	1	1	1
04065	Courgette, green, unpeeled, boiled, drained (without salt)	19	0.4	11	34	104	1	0.28	1
04015	Cowpea, leaves, picked, raw	188	2.7	47	17	485	31	1	1
SD or min-max				10	8				
n		1	1	3	3	1	1	1	1
04066	Cowpea, leaves, picked, boiled, drained (without salt)	170	1.9	27	15	231	22	0.53	0

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04055	Capsicum (sweet peper), red, boiled, drained (without salt)	21	42	0	254	0.03	0.04	0.7	30	30	0	117
04056	Capsicum (sweet peper), red, grilled (without salt and fat)	20	40	0	238	0.04	0.05	1.0	39	39	0	134
04057	Capsicum (sweet peper), red, baked (without salt)	19	38	0	231	0.04	0.05	1.0	38	38	0	130
04010	Capsicum (sweet peper), yellow, raw	14	28	0	166	0.14	0.02	0.59	30	30	0	127
n						1	1	1		1		1
04058	Capsicum (sweet peper), yellow, boiled, drained (without salt)	14	29	0	172	0.10	0.01	0.4	17	17	0	95
04059	Capsicum (sweet peper), yellow, grilled (without salt and fat)	13	27	0	161	0.14	0.02	0.6	23	23	0	109
04060	Capsicum (sweet peper), yellow, baked (without salt)	13	26	0	156	0.13	0.02	0.6	22	22	0	106
04011	Carrot, peeled, raw	589	1180	0	7070	0.04	0.03	0.22	18	18	0	5.5
SD or min-max						0.00	0.01					2.5
n						3	4	1		1		3
04061	Carrot, peeled, boiled, drained (without salt)	564	1130	0	6770	0.03	0.02	0.2	10	10	0	2
04062	Carrot, peeled, stewed (without salt)	552	1110	0	6630	0.04	0.03	0.2	13	13	0	5
04012	Cauliflower, tops and stems, raw	0	0	0	2	0.06	0.09	0.5	44	44	0	70
SD or min-max										22-65		
n						1	1	1		2		1
04063	Cauliflower, tops and stems, boiled, drained (without salt)	0	0	0	1	0.04	0.06	0.3	22	22	0	46
04013	Celery, stalk, raw	39	78	0	465	0.03	0.03	0.40	13	13	0	12
SD or min-max						0.03-0.03						7-17
n						2	1	1		1		2
04064	Celery, stalk, boiled, drained (without salt)	39	78	0	465	0.02	0.02	0.3	7	7	0	9
04014	Courgette, green, unpeeled, raw	23	46	0	278	0.03	0.06	0.60	17	17	0	24
n						1	1	1		1		1
04065	Courgette, green, unpeeled, boiled, drained (without salt)	14	28	0	168	0.02	0.04	0.4	9	9	0	17
04015	Cowpea, leaves, picked, raw	36	72	0	0	0.49	0.37	1.60	95	95	0	50
n						1	1	1		1		1
04066	Cowpea, leaves, picked, boiled, drained (without salt)	0	0	0	0	0.30	0.23	1.0	45	45	0	19

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04067	Cowpea, leaves, picked, steamed (without salt)	1.00	107	26	90.2	2.9	0.4	0.6	4.3	1.7
04016	Cucumber, green, unpeeled, raw	0.97	47	11	96.2	0.6	0.1	1.3	1.4	0.5
SD or min-max					95.4-97	0.24				
n					2	4	1		1	1
04017	Eggplant / Brinjal, different varieties, whole edible, raw	0.91	111	27	90.8	1.2	0.3	2.8	4.0	0.9
SD or min-max					2	0.3				0.4
n					4	4	1		1	4
04068	Eggplant / Brinjal, different varieties, whole edible, boiled, drained (without salt)	1.00	119	29	90.1	1.3	0.3	3.0	4.3	1.0
04069	Eggplant / Brinjal, different varieties, whole edible, stewed (without salt)	1.00	139	33	88.5	1.5	0.4	3.4	5.0	1.2
04018	Jute mallow, picked leaves, raw	0.48	187	45	82.3	4.6	[0.2]	2.1	8.3	2.5
n					1	1	1		1	1
04070	Jute mallow, picked leaves, boiled, drained (without salt)	1.00	197	47	81.4	4.9	0.2	2.2	8.7	2.6
04071	Jute mallow, picked leaves, stewed (without salt)	1.00	231	56	78.2	5.7	0.2	2.6	10.2	3.1
04019	Kale, Ethiopian (kanzera), leaves, raw	0.61	113	27	90.4	3.3	0.6	0.2	4.0	1.6
n					1	1	1		1	1
04072	Kale, Ethiopian (kanzera), leaves, boiled, drained (without salt)	1.00	108	26	90.8	3.1	0.6	0.2	3.8	1.5
04073	Kale, Ethiopian (kanzera), leaves, steamed (without salt)	1.00	99	24	91.6	2.8	0.5	0.2	3.5	1.4
04020	Kale (sukuma wiki) raw	0.88	121	29	89.2	3.0	[0.3]	1.2	4.7	1.6
n					1	1	1		1	1
04074	Kale (sukuma wiki), boiled, drained (without salt)	1.00	115	28	89.7	2.9	0.3	1.2	4.4	1.5
04075	Kale (sukuma wiki), steamed (without salt)	1.00	105	25	90.6	2.6	0.3	1.1	4.1	1.4
04021	Leeks, bulb and stem, raw	0.65	229	54	84.5	1.7	0.4	9.5	3.1	0.8
SD or min-max					80.5-88.6	1.3-2.1				0.6-1.1
n					2	2	1		1	2
04076	Leeks, bulb and stem, boiled, drained (without salt)	1.00	276	66	81.4	2.0	0.5	11.4	3.7	1.0
04022	Lettuce, not further defined, raw	1.00	73	17	94.4	1.2	0.2	1.9	1.6	0.7
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
04	**VEGETABLES AND VEGETABLE PRODUCTS**								
04067	Cowpea, leaves, picked, steamed (without salt)	155	1.9	37	14	358	23	0.58	0
04016	Cucumber, green, unpeeled, raw	20	0.7	14	20	136	22	0.18	1
SD or min-max		17-22			17-24		16-29		
n		2	1	1	2	1	2	1	1
04017	Eggplant / Brinjal, different varieties, whole edible, raw	18	0.4	21	35	200	3	0.21	1
SD or min-max		5			31-40		3-3		
n		3	1	1	2	1	2	1	1
04068	Eggplant / Brinjal, different varieties, whole edible, boiled, drained (without salt)	19	0.3	14	34	108	2	0.17	0
04069	Eggplant / Brinjal, different varieties, whole edible, stewed (without salt)	23	0.5	26	44	250	4	0.26	1
04018	Jute mallow, picked leaves, raw	207	6.3	30	88	283	18	0.58	1
n		1	1	1	1	1	1	1	1
04070	Jute mallow, picked leaves, boiled, drained (without salt)	207	5.0	19	84	149	14	0.46	1
04071	Jute mallow, picked leaves, stewed (without salt)	255	7.8	37	109	349	23	0.72	1
04019	Kale, Ethiopian (kanzera), leaves, raw	117	5.7	54	51	639	7	0.7	tr
n		1	1	1	1	1	1	1	1
04072	Kale, Ethiopian (kanzera), leaves, boiled, drained (without salt)	105	4.0	31	43	304	5	0.48	tr
04073	Kale, Ethiopian (kanzera), leaves, steamed (without salt)	96	3.9	42	42	472	5	0.52	tr
04020	Kale (sukuma wiki) raw	402	2.8	41	67	238	71	0.5	0
n		1	1	1	1	1	1	1	1
04074	Kale (sukuma wiki), boiled, drained (without salt)	364	2.0	23	57	113	51	0.34	0
04075	Kale (sukuma wiki), steamed (without salt)	332	2.0	32	55	176	53	0.37	0
04021	Leeks, bulb and stem, raw	78	1.8	14	54	202	17	0.3	1
SD or min-max		39-118	1.8-1.8		53-53				
n		2	2	1	2	1	1	1	1
04076	Leeks, bulb and stem, boiled, drained (without salt)	90	1.6	10	58	110	11	0.27	1
04022	Lettuce, not further defined, raw	47	1.6	24	55	201	20	0.26	1
SD or min-max		32-63	1.4-1.9	16-32	43-66				
n		2	2	2	2	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04067	Cowpea, leaves, picked, steamed (without salt)	0	0	0	0	0.34	0.29	1.1	49	49	0	24
04016	Cucumber, green, unpeeled, raw	0	1	0	5	0.03	0.02	0.20	7	7	0	7
SD or min-max												7-7
n				1		1	1	1		1		2
04017	Eggplant / Brinjal, different varieties, whole edible, raw	12	24	0	146	0.05	0.05	1	29	29	0	2
n						1	1	1		1		1
04068	Eggplant / Brinjal, different varieties, whole edible, boiled, drained (without salt)	12	24	0	141	0.03	0.03	0.4	16	16	0	1
04069	Eggplant / Brinjal, different varieties, whole edible, stewed (without salt)	14	27	0	164	0.06	0.06	0.6	25	25	0	2
04018	Jute mallow, picked leaves, raw	217	434	0	2603	0.09	0.34	0.53	117	117	0	44.5
n						1	1	1		1		1
04070	Jute mallow, picked leaves, boiled, drained (without salt)	205	411	0	2466	0.06	0.23	0.4	61	61	0	18.3
04071	Jute mallow, picked leaves, stewed (without salt)	241	482	0	2892	0.10	0.40	0.6	101	101	0	32.2
04019	Kale, Ethiopian (kanzera), leaves, raw	118	236	0	1418	0.06	0.23	0.9	73	73	0	134
n						1	1	1		1		
04072	Kale, Ethiopian (kanzera), leaves, boiled, drained (without salt)	101	203	0	1215	0.04	0.14	0.6	35	35	0	51
04073	Kale, Ethiopian (kanzera), leaves, steamed (without salt)	92	185	0	1109	0.04	0.18	0.6	38	38	0	64
04020	Kale (sukuma wiki) raw	177	355	0	2127	0.11	0.13	1.0	62	62	0	134
SD or min-max												110-157
n						1	1	1		1		2
04074	Kale (sukuma wiki), boiled, drained (without salt)	152	304	0	1823	0.07	0.08	0.6	30	30	0	51
04075	Kale (sukuma wiki), steamed (without salt)	139	277	0	1665	0.08	0.10	0.7	33	33	0	64
04021	Leeks, bulb and stem, raw	20	40	0	242	0.14	0	0	64	64	0	21
SD or min-max						0.05-0.23						11-30
n						2	1	1		1		2
04076	Leeks, bulb and stem, boiled, drained (without salt)	22	44	0	262	0.12	0.07	0.3	39	39	0	10
04022	Lettuce, not further defined, raw	107	214	0	1285	0.08	0.05	0.26	66	66	0	10
SD or min-max						0.06-0.09		0.2-0.3		43-89		10-10
n						2	1	2		2		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04023	Mushroom, fresh, raw	1.00	148	35	89.7	2.3	0.4	4.5	2.3	0.9
SD or min-max					89.3-90.1				1.4-3.1	0.9-0.9
n					2	1	1		2	2
04077	Mushroom, fresh, boiled, drained (without salt)	1.00	203	48	85.9	3.2	0.5	6.1	3.1	1.2
04078	Mushroom, fresh, stewed (without salt)	1.00	183	43	87.3	2.8	0.5	5.5	2.8	1.1
04024	Mushroom, dried, raw	1.00	1180	283	11.9	12.3	[2.9]	32.4	39.1	1.4
SD or min-max					9.8-14					
n					2	1	1		1	1
04079	Mushroom, dried, boiled, drained (without salt)	1.00	674	162	49.6	7.0	1.6	18.5	22.4	0.8
04025	Mushroom, raw, canned in brine (drained)	1.00	73	18	93.0	1.5	0.4	0.2	3.7	1.2
SD or min-max							0.3-0.5			
n					1	1	2		1	1
04026	Okra, fresh, raw	0.74	136	32	90	2.0	0.2	3.5	3.7	0.7
n					1	1	1		1	1
04080	Okra, fresh, boiled, drained (without salt)	1.00	123	29	90.5	1.8	0.2	4.1	3.4	0.6
04081	Okra, fresh, stewed (without salt)		147	35	88.7	2.2	0.2	6.1	4.0	1.8
04027	Pumpkin, flesh, yellow w/o seeds, raw	0.80	134	32	90.3	1.2	[0.2]	5.2	2.4	0.7
n					1	1	1		1	1
04082	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	1.00	146	35	89.5	1.3	0.2	5.6	2.6	0.8
04083	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)		119	28	91.4	1.1	0.2	4.6	2.1	0.7
04028	Pumpkin, leaves, raw	0.82	156	37	87.3	4.2	[0.7]	2.2	2.3	3.2
n					1	1	1		1	1
04084	Pumpkin, leaves, boiled, drained (without salt)	1.00	148	35	87.9	4	0.7	2.1	2.1	3.1
04085	Pumpkin, leaves, steamed (without salt)	1.00	135	32	89.0	3.7	0.6	1.9	2.0	2.8
04029	Spider plant, leaves, raw	0.28	180	43	85	4.8	[0.8]	2.1	4.3	3
SD or min-max					3		0.4-1.1			
n					4	1	2			1
04086	Spider plant, leaves, boiled, drained (without salt)	1.00	172	41	85.7	4.6	0.7	2.0	4.1	2.9

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
04	**VEGETABLES AND VEGETABLE PRODUCTS**								
04023	Mushroom, fresh, raw	16	0.3	15	105	318	8	0.17	16
SD or min-max		12-20			100-110				
n		2	1	1	2	1	1	1	1
04077	Mushroom, fresh, boiled, drained (without salt)	21	0.3	12	129	218	8	0.17	20
04078	Mushroom, fresh, stewed (without salt)	20	0.4	19	130	393	10	0.21	20
04024	Mushroom, dried, raw	24	5.5	136	702	326	5	8.7	0
SD or min-max			5.2-5.7				3-6		
n		1	2	1	1	1	2	1	1
04079	Mushroom, dried, boiled, drained (without salt)	14	2.3	47	361	93	3	3.72	0
04025	Mushroom, raw, canned in brine (drained)	4	1	4	54	24	300	0	16
n		1	1	1	1	1	1	1	1
04026	Okra, fresh, raw	81	0.8	57	63	303	8	0.60	1
n		1	1	1	1	1	1	1	1
04080	Okra, fresh, boiled, drained (without salt)	70	0.5	31	52	138	5	0.41	1
04081	Okra, fresh, stewed (without salt)	84	0.7	56	65	280	7	0.59	1
04027	Pumpkin, flesh, yellow w/o seeds, raw	17	0.2	12	31	178	14	0.21	1
n		1	1	1	1	1	1	1	1
04082	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	18	0.2	8	30	97	11	0.17	0
04083	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	15	0.2	11	27	157	12	0.19	0
04028	Pumpkin, leaves, raw	383	5.6	142	119	423	12	0.9	1
n		1	1	1	1	1	1	1	1
04084	Pumpkin, leaves, boiled, drained (without salt)	347	4.0	81	102	201	9	0.64	1
04085	Pumpkin, leaves, steamed (without salt)	316	3.9	111	98	313	9	0.70	1
04029	Spider plant, leaves, raw	189	2.6	48	49	478	19	0.76	2
n		1	1	1	1	1	1	1	1
04086	Spider plant, leaves, boiled, drained (without salt)	171	1.9	27	42	228	13	0.54	2

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04023	Mushroom, fresh, raw	0	0	0	0	0.10	0.40	0.7	23	23	0	0
SD or min-max											0-0	
n						1	1	1		1	2	1
04077	Mushroom, fresh, boiled, drained (without salt)	0	0	0	0	0.09	0.36	0.6	16	16	0	0
04078	Mushroom, fresh, stewed (without salt)	0	0	0	0	0.11	0.47	0.8	20	20	0	0
04079	Mushroom, dried, boiled, drained (without salt)	0	0	0	0	0.09	0.06	1.4	47	47	0	0
04024	Mushroom, dried, raw	0	0	0	0	0.24	0.17	3.77	163	163	0	0
n						1	1	1		1		1
04025	Mushroom, raw, canned in brine (drained)	4	7	0	42	0.23	0.05	1.3	22	22	0	3
n						1	1	1		1		1
04026	Okra, fresh, raw	9	19	0	112	0.1	0.06	1.0	88	88	0	21
n				1		1	1	1		1		1
04080	Okra, fresh, boiled, drained (without salt)	8	15	0	91	0.05	0.04	0.6	40	40	0	12
04081	Okra, fresh, stewed (without salt)	9	18	0	109	0.08	0.06	0.9	57	57	0	17
04027	Pumpkin, flesh, yellow w/o seeds, raw	126	252	0	1512	0.07	0.06	0.78	50	50	0	8
n						1	1	1		1		1
04082	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	123	246	0	1479	0.05	0.04	0.5	27	27	0	6
04083	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	100	201	0	1204	0.06	0.05	0.7	31	31	0	6
04028	Pumpkin, leaves, raw	141	283	0	1695	0.07	0.12	1.49	36	36		12.3
n						1	1	1		1		1
04084	Pumpkin, leaves, boiled, drained (without salt)	121	242	0	1453	0.04	0.07	0.9	17	17	0	5
04085	Pumpkin, leaves, steamed (without salt)	111	221	0	1327	0.05	0.09	1.0	19	19	0	6
04029	Spider plant, leaves, raw	217	434	0	2603	0.1	0.12	1.3	346	346	0	64
SD or min-max												50-78
n						1	1	1		1		2
04086	Spider plant, leaves, boiled, drained (without salt)	186	372	0	2231	0.06	0.07	0.8	165	165	0	24

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04087	Spider plant, leaves, steamed (without salt)	1.00	157	38	86.9	4.2	0.7	1.9	3.8	2.6
04030	Spinach, leaves, raw	0.74	112	27	89.8	2.8	0.4	1.1	4.1	1.8
SD or min-max					88.6-91.1	1.8-3.8	0.3-0.4			
n					2	2	2		1	1
04088	Spinach, leaves, boiled, drained (without salt)	1.00	118	28	89.3	2.9	0.4	1.2	4.3	1.9
04089	Spinach, leaves, stewed (without salt)	1.00	139	33	87.4	3.5	0.4	1.4	5.1	2.2
04031	Spinach, Swiss chard, leaves, raw	0.5	102	25	90.3	3.1	[0.2]	0.7	3.6	2.0
n					1	1	1		1	1
04090	Spinach, Swiss chard, leaves, boiled, drained (without salt)	1.00	108	26	89.8	3.3	0.2	0.8	3.8	2.1
04091	Spinach, Swiss chard, leaves, stewed (without salt)	1.00	126	30	88.0	3.9	0.3	0.9	4.5	2.5
04032	Squash, butternut, peeled, flesh, raw	0.85	182	43	87.3	1.5	[0.1]	7.8	2.5	0.8
n					1	1	1		1	1
04092	Squash, butternut, peeled, flesh, boiled, drained (without salt)	1.00	204	48	85.7	1.6	0.1	8.8	2.8	0.9
04093	Squash, butternut, peeled, flesh, steamed (without salt)	1.00	204	48	85.7	1.6	0.1	8.8	2.8	0.9
04094	Squash, butternut, peeled, flesh, baked (without salt)	1.00	214	51	85.1	1.7	0.1	9.2	2.9	1.0
04033	Stinging nettle, leaves, raw	0.75	248	59	80	5.4	[0.7]	6.7	[2.1]	4.9
n					1	1	1		1	1
04095	Stinging nettle, leaves, boiled, drained (without salt)	1.00	237	56	81.1	5.1	0.7	6.4	2.0	4.7
04096	Stinging nettle, leaves, steamed (without salt)	1.00	216	51	82.8	4.7	0.6	5.8	1.8	4.3
04034	Sweet Potato (Leaves)	1.00	150	36	87.6	4.3	0.5	0.8	5.3	1.4
SD or min-max					0.7	4-4.6	0.5-0.6			0
n					3	2	2		1	3
04035	Tomato, green, raw	0.98	95	23	93.2	1.1	0.2	3.3	1.6	0.6
n					1	1			1	1
04097	Tomato, green, boiled, drained (without salt)	1.00	121	29	91.3	1.4	0.3	4.2	2.1	0.8
04036	Tomato, red, ripe, raw	0.98	92	22	93.6	1.0	[0.2]	3.3	1.4	0.5
n					1	1	1		1	1
04098	Tomato, red, ripe, boiled, drained (without salt)	1.00	118	28	91.8	1.3	0.3	4.2	1.8	0.7

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
04	**VEGETABLES AND VEGETABLE PRODUCTS**								
04087	Spider plant, leaves, steamed (without salt)	156	1.8	37	40	353	14	0.59	1
04030	Spinach, leaves, raw	131	1.7	72	28	570	59	1	1
SD or min-max		96-165							
n		2	1	1	1	1	1	1	1
04088	Spinach, leaves, boiled, drained (without salt)	131	1.4	45	27	300	46	0.47	0
04089	Spinach, leaves, stewed (without salt)	161	2.1	89	35	704	72	0.74	1
04031	Spinach, Swiss chard, leaves, raw	117	4.4	78	50	348	892	0.73	1
n		1	1	1	1	1	1	1	1
04090	Spinach, Swiss chard, leaves, boiled, drained (without salt)	117	3.5	49	47	183	704	0.58	1
04091	Spinach, Swiss chard, leaves, stewed (without salt)	144	5.4	96	62	430	1101	0.90	1
04032	Squash, butternut, peeled, flesh, raw	18	1.0	16	19	332	7.7	0.2	1
n		1	1	1	1	1	1	1	1
04092	Squash, butternut, peeled, flesh, boiled, drained (without salt)	19	0.8	11	20	186	7	0.16	1
04093	Squash, butternut, peeled, flesh, steamed (without salt)	19	0.9	16	21	317	7	0.20	1
04094	Squash, butternut, peeled, flesh, baked (without salt)	21	1.2	19	23	390	9	0.23	1
04033	Stinging nettle, leaves, raw	668	7.2	133	122	524	36	1	2
n		1	1	1	1	1	1	1	1
04095	Stinging nettle, leaves, boiled, drained (without salt)	604	5.2	76	105	250	26	0.49	2
04096	Stinging nettle, leaves, steamed (without salt)	552	5.0	104	101	387	27	0.54	2
04034	Sweet Potato (Leaves)	118	1.0	61	30	620	6	0.29	1
n		1	1	1	1	1	1	1	1
04035	Tomato, green, raw	8	0.4	14	23	225	13	0.2	8
n		1	1	1	1	1	1	1	1
04097	Tomato, green, boiled, drained (without salt)	10	0.4	10	26	144	13	0.15	10
04036	Tomato, red, ripe, raw	8	0.9	9.5	25	126	21	0.37	0
SD or min-max		8-9							
n		2	1	1	1	1	1	1	1
04098	Tomato, red, ripe, boiled, drained (without salt)	10	0.8	7	28	81	20	0.35	0

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04087	Spider plant, leaves, steamed (without salt)	170	339	0	2037	0.07	0.09	0.9	181	181	0	31
04030	Spinach, leaves, raw	189	377	0	2260	0.03	0.18	0.40	110	110	0	37
SD or min-max							0.1					27-46
n						1	3	1		1		2
04088	Spinach, leaves, boiled, drained (without salt)	179	357	0	2140	0.02	0.12	0.3	58	58	0	15
04089	Spinach, leaves, stewed (without salt)	209	419	0	2510	0.03	0.21	0.5	95	95	0	27
04031	Spinach, Swiss chard, leaves, raw	190	380	0	2280	0.03	0.10	0.60	121	121	0	24
n						1	1	1		1		1
04090	Spinach, Swiss chard, leaves, boiled, drained (without salt)	180	360	0	2160	0.02	0.07	0.4	64	64	0	10
04091	Spinach, Swiss chard, leaves, stewed (without salt)	211	422	0	2530	0.03	0.12	0.7	105	105	0	18
04032	Squash, butternut, peeled, flesh, raw	160	320	0	1920	0.07	0.06	1.02	31	31	0	8
n						1	1	1		1		1
04092	Squash, butternut, peeled, flesh, boiled, drained (without salt)	162	324	0	1940	0.05	0.04	0.7	18	18	0	6
04093	Squash, butternut, peeled, flesh, steamed (without salt)	162	324	0	1940	0.06	0.06	0.9	21	21	0	7
04094	Squash, butternut, peeled, flesh, baked (without salt)	169	339	0	2030	0.07	0.06	1.1	26	26	0	8
04033	Stinging nettle, leaves, raw	2	3	0		0.04	0	1	457	457	0	5
n						1	1	1		1		1
04095	Stinging nettle, leaves, boiled, drained (without salt)	0	0	0	0	0.02	0.19	0.7	218	218	0	2
04096	Stinging nettle, leaves, steamed (without salt)	0	0	0	0	0.03	0.24	0.7	238	238	0	2
004034	Sweet Potato (Leaves)	189	378	0	2270	0.1	0.35	1.1	1	1	0	11
n						1	1	1		1		1
04035	Tomato, green, raw	3	5	0	32	0.08	0.1	0.5	9	9	0	16
n						1	1	1		1		1
04097	Tomato, green, boiled, drained (without salt)	3	6	0	37	0.07	0.04	0.4	6	6	0	14
04036	Tomato, red, ripe, raw	26	53	0	316	0.04	0.04	0.5	25	25	0	25
n						1	1	1		1		1
04098	Tomato, red, ripe, boiled, drained (without salt)	30	61	0	365	0.04	0.04	0.5	16	16	0	21

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
04	**VEGETABLE AND VEGETABLE PROCUCTS**									
04037	Tomato, canned, whole contents	1.00	84	20	94.0	1.0	0.1	3.1	1.3	0.5
n					1	1	1		1	1
04038	Vine (African) spinach, picked leaves, raw	0.94	117	28	90.4	3.4	0.7	0.2	3.7	1.6
n					1	1	1		1	1
04099	Vine (African) spinach, picked leaves, boiled, drained (without salt)	1.00	123	30	89.9	3.6	0.7	0.2	3.9	1.7
05	**FRUITS**									
05001	Apple, green skin, unpeeled, raw	0.90	231	55	85	0.3	0	12.2	2.4	0.2
SD or min-max					0	0.1	0-0		2.3-2.5	0.1
n					3	3	2		2	3
05002	Apple, red, unpeeled, raw	0.90	239	57	84.6	0.3	0.1	12.4	2.3	0.25
SD or min-max					1	0.1	0.2		0.1	0.05
n					6	6	5		5	6
05003	Avocado, ripe, raw	0.71	761	185	74	1.6	19.6	0	4.0	1.9
SD or min-max										1.2-2.7
n					1	1	1		1	2
05004	Banana, cavendish, raw	0.62	402	95	74.4	1.08	[0.3]	20.6	2.75	0.90
SD or min-max										
n					1	1	1		1	1
05005	Baobab fruit, powderly part, dry, raw	0.23	1335	315	13.1	2.3	0.4	72.2	[6.8]	5.2
SD or min-max										
n					1	1	1		1	1
05006	Custard apple, peeled, raw	0.72	386	92	75	1.7	[0.7]	17.0	5.1	0.8
SD or min-max					3	0.3	0.3			0.6-0.9
n					3	3	3		1	2
05007	Date, dried	0.84	1292	305	17.2	2.4	0.2	68.7	9.7	1.9
SD or min-max						2-2.7				
n					1	2	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
04	**VEGETABLES AND VEGETABLE PRODUCTS**								
04037	Tomato, canned, whole contents	22	0.6	11	20	204	68	0.16	1
n		1	1	1	1	1	1	1	1
04038	Vine (African) spinach, picked leaves, raw	267	10.9	40	56	446	8	0.5	tr
n		1	1	1	1	1	1	1	1
04099	Vine (African) spinach, picked leaves, boiled, drained (without salt)	267	8.6	25	53	234	6	0.36	0
05	**FRUITS**								
05001	Apple, green skin, unpeeled, raw	6	0.4	4	10	99	2	0.07	1
SD 0r min-max		3	0.5	4-4	3	90-108	1-2	0.07-0.07	1-1
n		3	3	2	3	2	2	2	2
05002	Apple, red, unpeeled, raw	6	0.3	4	9	100	1	0.07	1
SD 0r min-max		2	0.4	1	2	10	1	0.04	0
n		6	6	5	6	5	5	5	5
05003	Avocado, ripe, raw	19	1	25	41	281	7	0.39	0
SD 0r min-max		19-19			36-46				
n		2	1	1	2	1	1	1	1
05004	Banana, cavendish, raw	10	0.3	26	37	187	0	0.36	0
SD 0r min-max		9-10		24-28					
n		2		2	1	1		1	1
05005	Baobab fruit, powderly part, dry, raw	283	5.0	108	56	1613	56	0.88	24
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05006	Custard apple, peeled, raw	28	0.4	38	22	278	3	0	0
SD 0r min-max					19-26				
n		1	1	1	2	1	1	1	
05007	Date, dried	82	2.6	50	72	730	14	0.6	3
SD 0r min-max					58-85				
n		1	1	1	2	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
04	**VEGETABLE AND VEGETABLE PROCUCTS**											
04037	Tomato, canned, whole contents	28	56	0	334	0	0	0.6	26	26	0	6
SD or min-max												
n						1	1	1		1		1
04038	Vine (African) spinach, picked leaves, raw	184	369	0	2210	0.1	0.2	0.9	71	71.3	0	79.8
SD or min-max												17.0
n						1	1	1		1		3
04099	Vine (African) spinach, picked leaves, boiled, drained (without salt)	175	349	0	2100	0.04	0.14	0.6	38	38	0	34
05	**FRUITS**											
05001	Apple, green skin, unpeeled, raw	1	2	0	11	0.025	0.01	0.1	0	0	0	4
SD or min-max				0-0		0.02-0.03	0.01-0.01	0.1-0.1		0-0		2
n				2		2	2	2		2		3
05002	Apple, red, unpeeled, raw	1	2	0	14	0.02	0.01	0.13	5	5	0	4
SD or min-max						0.00	0.01	0.07		11		2
n						5	5	5		5		6
05003	Avocado, ripe, raw	2	5	0	27	0.07	0.15	1.8	67	67	0	14
SD or min-max												10-18
n						1	1	1		1		2
05004	Banana, cavendish, raw	5	9	0	56	0.05	0.05	0.35	22	22	0	4
SD or min-max												
n						1	1			1		
05005	Baobab fruit, powderly part, dry, raw	0	0	0	tr	0.04	0.20	1.5	50	50	0	13.7
SD or min-max												
n						1	1	1		1		1
05006	Custard apple, peeled, raw	0	0	0	0	0.07	0.13	0.7	37	37	0	22
SD or min-max							0.09-0.17					
n						1	2	1		1		1
05007	Date, dried	2	4	0	23	0.03	0.13	1.4	19	19	0	5
SD or min-max						0-0.06	0.1-0.15					
n						2	2	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
05	**FRUITS**									
05008	Date, raw	0.86	645	152	60.2	1.6	0.1	35.3	[1.8]	1
SD or min-max										
n					1	1				1
05009	Doumpalm fruit, raw	0.28	1180	280	17.6	2.8	[0.7]	58.3	[14.8]	5.9
SD or min-max					6.30	1.11	0.4-0.9		14-15.5	4.5-7.3
n					3	3	2		2	2
05010	Grapes, green, raw	0.95	302	71	80.7	0.6	0.1	16.0	2.0	0.6
SD or min-max					79.2-82.2	0.5-0.6			1.3	
n					2	2	1		3	1
05011	Guava, pink-fleshed, raw	1.00	196	48	80.7	1.1	1.1	0.9	15.5	0.8
SD or min-max										
n					1	1	1		1	1
05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	0.23	403	95	73.2	1.4	[0.2]	20.5	2.8	1.9
SD or min-max										
n					1	1	1		1	1
05013	Lemon, juice, home squeezed	1.00	198	47	87	0.6	0.2	9.5	2.5	0.25
SD or min-max					85-89					0.2-0.3
n					2	1	1		1	2
05014	Lemon peel, raw	1.00	213	52	81.6	1.5	0.3	5.4	10.6	0.6
SD or min-max										
n					1	1	1		1	1
05015	Lemon, pulp, raw	0.66	155	37	89.5	0.82	0.2	6.7	2.5	0.3
SD or min-max										0.2-0.5
n					1	1	1		1	2
05016	Lime, juice	1.00	125	30	90.3	0.7	0.2	4.3	4.1	0.4
SD or min-max										
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
05	**FRUITS**								
05008	Date, raw	34	0.3	24	28	410	7	0.2	1
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05009	Doumpalm fruit, raw	73	18	53	45	862	0.47	3.40	-
SD 0r min-max		68-78	4						
n		2	3	1	1	1	1	1	
05010	Grapes, green, raw	14	0.3	7.1	24	171	3	0.1	0
SD 0r min-max		4	0.1	1	5	8	2	0	0
n		4	4	3	4	3	3	3	3
05011	Guava, pink-fleshed, raw	20	0.4	18	31	334	1	0.26	tr
SD 0r min-max		16-24			30-31				
n		2	1	1	2	1	1	1	
05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	35	0	32	23	279	2	0.76	0
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05013	Lemon, juice, home squeezed	20	0.3	12	10	120	2	0	0
SD 0r min-max				9-14					
n		1	1	2	1	1	1	1	1
05014	Lemon peel, raw	134	0.8	15	12	160	6	0.25	1
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05015	Lemon, pulp, raw	33	0.3	15	16	120	2	0.10	0
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05016	Lime, juice	26	0.3	11	20	150	3	0	0
SD 0r min-max		22-30							
n		2	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
05	**FRUITS**											
05008	Date, raw	2	3	0	20	0.06	0.07	0.7	25	25	0	22
SD or min-max												14-30
n						1	1	1		1		2
05009	Doumpalm fruit, raw	-	-	0	-	0.05	0.1	-	0	-	0	-
SD or min-max												
n						1	1					
05010	Grapes, green, raw	2	5	0	29	0.03	0.03	0.2	4	4	0	14
SD or min-max						0.02	0.01	0.2				6
n						3	3	3		1		3
05011	Guava, pink-fleshed, raw	22	45	0	267	0.06	0.05	0.6	16	16	0	222
SD or min-max												
n						1	1	1		1		1
05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	7	15	0	90	0.07	0.13	0.7	19	19	0	7
SD or min-max												
n						1	1	1		1		1
05013	Lemon, juice, home squeezed	1	2	0	10	0.02	0.01	0.2	11	11	0	44
SD or min-max												39-48
n						1	1	1		1		2
05014	Lemon peel, raw	3	5	0	30	0.06	0.08	0.4	13	13	0	129
SD or min-max												
n						1	1	1		1		1
05015	Lemon, pulp, raw	1	2	0	10	0.03	0.02	0.2	11	11	0	44
SD or min-max												5
n						1	1	1		1		10
05016	Lime, juice	2	5	0	28	0.03	0.02	0.2	6	6	0	41
SD or min-max												4
n						1	1	1		1		6

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
05	**FRUITS**									
05017	Lime, pulp, raw	0.7	178	42	87.1	0.7	0.2	7.4	4.1	0.6
SD or min-max					84.6-89.5	0.6-0.8				0.4-0.7
n					2	2	1		1	2
05018	Loquat, peeled, raw	0.75	214	51	84.6	0.62	0.2	9.5	4.51	0.7
SD or min-max							0.2-0.2			
n					1	1	2		1	1
05019	Mango, ripe, raw	0.72	272	64	83	0.6	0.3	14.0	1.6	0.5
SD or min-max							0.2-0.4		1.6-1.6	
n					1	1	2		2	1
05020	Mango, unripe, raw	0.72	192	45	86.7	0.8	0.1	8.9	3.0	0.6
SD or min-max					85.1-88.2	0.7-0.9	0.1-0.1			0.5-0.7
n					2	2	2		1	2
05021	Mulberry, raw	0.99	148	35	89.5	1.6	0.2	5.6	2.2	0.9
SD or min-max					89.3-89.8	1-2.2				0.8-0.9
n					2	2	1		1	2
05022	Orange, Juice	1.00	77	18	94.6	0.4	0.1	3.6	1.1	0.4
SD or min-max					91.4-97.7	0.2-0.5	0.06		1.3	
n					2	2	4		3	1
05023	Orange, pulp, raw	0.75	176	42	87.6	0.9	[0.2]	7.5	3.1	0.7
SD or min-max									0.9	
n					1	1	1		3	1
05024	Papaya, yellow skin, peeled, raw	0.76	153	36	89.8	0.6	[0.3]	6.8	2.1	0.5
SD or min-max										
n					1	1	1		1	1
05025	Passion fruit, dark purple skin, raw	0.52	313	75	75.7	2.4	[0.9]	8.7	11.7	0.8
SD or min-max										
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
05	**FRUITS**								
05017	Lime, pulp, raw	22	0	11	20	150	3	0.1	0
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05018	Loquat, peeled, raw	13	0.5	13	20	180	2	0.22	tr
SD 0r min-max									
n		1	1	1	1	1	1	1	
05019	Mango, ripe, raw	14	0.2	9	17	186	1	0.14	1
SD 0r min-max		9	0.2-0.3	8-10	5	168-203	1-1	0.09-0.19	1-1
n		3	2	2	3	2	2	2	2
05020	Mango, unripe, raw	27	0.4	18	15	147	26	0.09	0
SD 0r min-max							18-33		
n		1	1	1	1	1	2	1	
05021	Mulberry, raw	55	1.2	19	40	310	6	0.2	1
SD 0r min-max		30	0.9	12-25	10				
n		4	4	2	4	1	1	1	1
05022	Orange, Juice	21	0.7	11	20	146	2	0.08	0
SD 0r min-max				11-11	19-20	1	1	0.09	0
n		1	1	2	2	3	3	3	3
05023	Orange, pulp, raw	23	0.2	10	13	165	5	0.05	0
SD 0r min-max		5	0.1-0.3						
n		4	2	1	1	1	1	1	1
05024	Papaya, yellow skin, peeled, raw	21	0.6	28	17	140	4	0.20	0
SD 0r min-max		21-21	0.6-0.6		15-18				
n		2	2	1	2		1	1	1
05025	Passion fruit, dark purple skin, raw	10	0.6	28	68	200	19	0.8	1
SD 0r min-max									
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
05	**FRUITS**											
05017	Lime, pulp, raw	3	5	0	31	0.02	0.03	0.2	8	8	0	55
SD or min-max												47-63.1
n						1	1	1		1		2
05018	Loquat, peeled, raw	45	89	0	537	0.02	0.04	0.3	14	14	0	4.1
SD or min-max												
n						1	1	1		1		1
05019	Mango, ripe, raw	92	184	0	1105	0.03	0.04	0.6	54	54	0	35
SD or min-max							0.01	0.6-0.7		43-64		7
n						1	3	2		2		3
05020	Mango, unripe, raw	7	13	0	78	0.02	0.03	0.26	[26]	[26]	0	88
SD or min-max												86-90.2
n						1	1	1		1		2
05021	Mulberry, raw	1	2	0	10	0.03	0.07	0.7	33	33	0	11
SD or min-max						0.01-0.04	0.01-0.13					10-12
n						2	2	1		1		2
05022	Orange, Juice	3	7	0	42	0.06	0.02	0.1	44	44	0	[64]
SD or min-max								0.1		6.7		
n						1	1	3		3		1
05023	Orange, pulp, raw	5	9	0	57	0.04	0.03	0.2	52	52	0	45
SD or min-max						0.02-0.06	0.02-0.03	0.2-0.2				
n						2	2	2		1		1
05024	Papaya, yellow skin, peeled, raw	85	170	0	1018	0.04	0.03	0.3	37	37	0	51
SD or min-max												
n						1	1			1		1
05025	Passion fruit, dark purple skin, raw	64	127	0	764	0.03	0.14	2.5	7	7	0	29
SD or min-max												
n										1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
05	**FRUITS**									
05026	Passion Fruit, juice	1.00	408	96	75.5	0.8	0.1	22.9	0.2	0.5
SD or min-max							0.07		0.2-0.2	
n					1	1	3		2	1
05027	Peach, yellow-fleshed, unpeeled, raw	0.88	204	48	86.7	1.0	0.1	9.9	1.9	0.4
SD or min-max					86-87.4	0.8-1.2				
n					2	2	1		1	1
05028	Pear, unpeeled, raw	0.85	200	48	86.0	0.4	0.2	9.1	4	0.3
SD or min-max						0.2	0		3.6-4.5	
n					1	3	3		2	1
05029	Pineapple, canned in syrup, whole contents	1.00	393	93	77	0.3	0.6	21.2	0.7	0.2
SD or min-max										
n					1	1	1		1	1
05030	Pineapple, raw	0.68	172	41	88.6	0.48	[0.2]	8.1	2.3	0.3
SD or min-max										0.3-0.4
n					1	1	1		1	2
05031	Plum, purple skin, raw	0.93	200	47	86.9	0.7	0.1	9.9	2.0	0.4
SD or min-max									2-2.1	
n					1	1	1		2	1
05032	Pomegranate, raw	0.57	312	74	78.1	1.6	0.2	13.3	6.4	0.4
SD or min-max										
n					1	1	1		1	1
05033	Raspberry, raw	1.00	228	54	83.2	1.4	0.2	8.9	5.6	0.7
SD or min-max					1.9	1-1.8				0.4-0.9
n					3	2	1		1	2
05034	Strawberry, raw	0.96	146	35	90	0.7	0.2	6.3	2.5	0.4
SD or min-max					87.8-92.1					
n					2	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
05	**FRUITS**								
05026	Passion Fruit, juice	13	0.4	21	20	252	10	0.30	0
SD 0r min-max		13-14	0.1	6.9	6.1	45.0	7.5	0.4	0-0
n		2	3	3	3	3	3	3	2
05027	Peach, yellow-fleshed, unpeeled, raw	5	0.3	8	20	203	2	0.11	1
SD 0r min-max			0.3-0.3				2-2		
n		1	2	1	1	1	2	1	1
05028	Pear, unpeeled, raw	8	0.3	7	11	96	1	0.08	0
SD 0r min-max			0.2	6-8	4		1-2	0.07-0.09	0-1
n		1	3	2	3	1	2	2	2
05029	Pineapple, canned in syrup, whole contents	4	0.4	11	3	80	6	0	1
SD 0r min-max									
n		1	1	1	1	1	1	1	1
05030	Pineapple, raw	16	0.4	13	8	143	1	0.37	1
SD 0r min-max		1	0.4-0.4		2-14				
n		3	2		2			1	1
05031	Plum, purple skin, raw	10	0.4	7	12	158	1	0.1	0
SD 0r min-max			0.2	6-8		153-162		0.1-0.1	0-1
n		1	3	2	1	2	1	2	2
05032	Pomegranate, raw	12	0.8	9	37	172	4	0.4	1
SD 0r min-max			0.5-1			133-210			
n		1	2	1	1	2	1	1	1
05033	Raspberry, raw	27	0.8	25	37	156	1	0.32	1
SD 0r min-max		14-40	0.5-1.1		34-39				
n		2	2	1	2	1	1	1	1
05034	Strawberry, raw	19	0.6	8	27	158	3	0.18	1
SD 0r min-max		8-30			24-30				
n		2	1	1	2	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
05	**FRUITS**											
05026	Passion Fruit, juice	45	90	0	538	0.07	0.01	1.5	8	8	0	23
SD or min-max								0.8		7-8		6
n						1	1	3		2		3
05027	Peach, yellow-fleshed, unpeeled, raw	13	26	0	157	0.01	0.03	0.8	0	4	0	8
SD or min-max						0.01-0.02	0.01					2
n						2	3	1		1		3
05028	Pear, unpeeled, raw	1	2	0	14	0.03	0.03	0.1	7	7	0	4
SD or min-max						0.02		0.1-0.1				3.3-5
n						3	1	2		1		2
05029	Pineapple, canned in syrup, whole contents	1	1	0	8	0.05	0	0	5	5	0	9
SD or min-max												8-10
n						1	1	1		1		2
05030	Pineapple, raw	3	5	0	31	0.05	0.03	0.12	32	32	0	36.4
SD or min-max												
n										1		
05031	Plum, purple skin, raw	6	12	0	74	0.04	0.06	0.5	1	6	0	4
SD or min-max							0.04			8		2
n						1	3	2		5		3
05032	Pomegranate, raw	4	9	0	53	0.06	0.06	0.4	38	38	0	15
SD or min-max												
n						1	2	1		1		2
05033	Raspberry, raw	3	5	0	30	0.04	0.03	0.3	34	34	0	30
SD or min-max												
n						1	1	1		1		2
05034	Strawberry, raw	0	0	0	1	0.03	0.02	0.1	39	39	0	49
SD or min-max												
n						1	1	1		1		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
05	**FRUITS**									
05035	Tangerine, juice, non-commercial	1.00	195	46	88.3	0.6	0.2	10.3	0.2	0.4
SD or min-max					86.1-90.5	0.2				0.1
n					2	3	1		1	3
05036	Tangerine, pulp, raw	0.75	218	52	86.2	0.87	0.2	10.8	1.5	0.4
SD or min-max						0.7-1				0.3-0.5
n					1	2	1		1	2
05037	Tree tomato, dark red skin, peeled, raw	0.40	177	43	85.6	2.1	[0.3]	4.6	6.5	0.9
n					1	1	1		1	1
05038	Watermelon, fruit, green with white stripes, raw	0.64	112	26	92.9	0.6	[0.3]	5	0.93	0.3
n					1	1	1		1	1
05039	Zambarau, peeled, raw	0.62	252	59	85.3	0.52	[0.4]	[13.5]		0.4
n					1	1	1			1
06	**MILK AND DAIRY PRODUCTS**									
06001	Butter (cow milk), no added salt (~80-84% fat)	1.00	3020	735	17.2	1.1	81.3	0	0	0.7
SD or min-max					15.3-19					
n					2	1	1			1
06002	Butter (cow milk), salted (~80% fat)	1.00	3040	739	15.3	1.1	81.3	0.6	0	1.7
SD or min-max										
n					1	1	1			1
06003	Cheese, cheddar, regular fat	1.00	1660	401	37	26	32.8	0.4	0	3.8
SD or min-max										
n					1	1	1			1
06004	Cheese, cottage (cow milk), plain, skimmed	1.00	382	91	79	13.3	2.5	3.8	0	1.5
SD or min-max						12.5-14				
n					1	2	1			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
05	**FRUITS**								
05035	Tangerine, juice, non-commercial	12	0.2	11	20	178	1	0.03	0.1
SD or min-max		8-18							
n		2	1	1	1	1	1	1	1
05036	Tangerine, pulp, raw	26	0	17	17	150	2	0.1	1
n		1	1	1	1	1	1	1	1
05037	Tree tomato, dark red skin, peeled, raw	56	1.0	19	51	133	20	0.4	0
n		1	1	1	1	1	1	1	1
05038	Watermelon, fruit, green with white stripes, raw	4	0.7	10	20	88	2	0.21	0
n		1	1	1	1	1	1	1	1
05039	Zambarau, peeled, raw	44	0.5	17	17	72	11	0.42	1
n		1	1	1	1	1	1	1	1
06	**MILK AND MILK PRODUCTS**								
06001	Butter (cow milk), no added salt (~80-84% fat)	15	0	2	20	15	10	0.06	1
n		1	1	1	1	1	1	1	1
06002	Butter (cow milk), salted (~80% fat)	17	0.01	2	16	23	776	0.06	1
n		1	1	1	1	1	1	1	1
06003	Cheese, cheddar, regular fat	800	0.3	27	478	73	600	3.55	17
SD or min-max			0.1-0.4						
n		1	2	1	1	1	1	1	1
06004	Cheese, cottage (cow milk), plain, skimmed	60	0.1	8	143	123	450	0.24	6
n		1	1	1	1	1	1	1	1

Code	Food Name	Food name	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
05	**FRUITS**											
05035	Tangerine, juice, non-commercial	13	25	0	152	0.04	0.03	0.1	21	21	0	37
SD or min-max												4
n						2	1	1		2		7
05036	Tangerine, pulp, raw	1	2	0	10	0.08	0.05	0.3	24	24	0	36
SD or min-max												
n						1	1	1		1		2
05037	Tree tomato, dark red skin, peeled, raw	45	91	0	546	0.13	0.1	1.6	63	63	0	12.6
SD or min-max												
n						1	1	1		1		1
05038	Watermelon, fruit, green with white stripes, raw	21	41	0	246	0.03	0.04	0.26	16	16	0	11.5
SD or min-max												
n						1	1	1		1		1
05039	Zambarau, peeled, raw	-	-	-	-	-	-	-	-	-	0	-
SD or min-max												
n												
06	**MILK AND DAIRY PRODUCTS**											
06001	Butter (cow milk), no added salt (~80-84% fat)	845	858	832	153	0	0.05	1.1	6	6	0	0
SD or min-max												
n				1	1	1	1	1		1	1	2
06002	Butter (cow milk), salted (~80% fat)	845	858	832	153	0	0.05	1.1	6	6	0	0
SD or min-max												
n				1	1	1	1	1		1	1	1
06003	Cheese, cheddar, regular fat	166	174	159	87	0.04	0.5	1.5	52	52	1.9	1
SD or min-max												
n				1	1	1	1	1		1	1	1
06004	Cheese, cottage (cow milk), plain, skimmed	34	37	30	44	0.05	0.2	0.5	3	3	0.6	0
SD or min-max												
n				1	1	1	1	1		1	1	2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
06	**MILK AND DAIRY PRODUCTS**									
06005	Cheese, cottage (cow milk), plain, whole	1.00	508	121	75.4	15.4	5.7	2.1	0	1.4
SD or min-max										
n					1	1	1			1
06006	Cheese, cottage, Milk, Cow, Sour	1.00	515	122	73.6	13.7	4.3	7.2	0	1.2
SD or min-max						11.1-16.3				0.9-1.4
n					1	2	1			2
06007	Cream, pure, 35% fat	1.00	943	229	72	2.4	23.6	1.7	0	0.3
SD or min-max										
n					1	1	1			1
06008	Ghee (cow milk)	1.00	3690	898	0	0.3	99.9	0	0	0.5
SD or min-max										0.2-0.7
n					1	1	1			2
06009	Ice cream, caramel flavour, regular fat	1.00	856	205	61.4	3.7	10.6	23.6	0	0.7
SD or min-max										
n					1	1	1			1
06010	Ice cream, chocolate flavour, regular fat	1.00	946	226	56.4	4.4	12	24.2	2.0	1
SD or min-max					0.9	0.7	4			0.1
n					4	4	4			4
06011	Ice cream, strawberry flavour, regular fat	1.00	842	201	60.7	3.5	9.5	25.2	0.5	0.7
SD or min-max					60-61.4	3.7-4	8.4-10.6			0.7-0.7
n					2	2	2			2
06012	Ice cream, vanilla flavour, regular fat	1.00	834	199	62.7	3.9	10.6	22.2	0	0.7
SD or min-max					61.4-64	3.7-4				
n					2	2	1			1
06013	Ice cream, vanilla flavour, with nuts, regular fat	1.00	917	219	59.6	4.0	12.2	23.3	0.2	0.7
SD or min-max										
n					1	1	1			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
06	**MILK AND MILK PRODUCTS**								
06005	Cheese, cottage (cow milk), plain, whole	89	0.1	8	143	123	277	0.24	6
n		1	1	1	1	1	1	1	1
06006	Cheese, cottage, Milk, Cow, Sour	112	0.7	8	180	104	364	0.4	10
SD or min-max			0.1-1.4						
n		1	2	1	1	1	1	1	1
06007	Cream, pure, 35% fat	39	0.3	4	60	55	40	0	0
n		1	1	1	1	1	1	1	1
06008	Ghee (cow milk)	2	0.2	0	3	5	2	0.01	1
SD or min-max			0-0.4						
n		1	2	1	1	1	1	1	1
06009	Ice cream, caramel flavour, regular fat	93	0.1	12	84	142	48	0.23	1
SD or min-max									
n		1	1	1	1	1	1	1	1
06010	Ice cream, chocolate flavour, regular fat	130	0.9	30	110	245	71	0.6	2
SD or min-max		25	0.07	2	5	6	9	0.03	0
n		4	4	3	3	3	4	3	3
06011	Ice cream, strawberry flavour, regular fat	107	0.2	13	92	165	54	0.29	2
SD or min-max		93-120	0.1-0.2	12-14	84-100	142-188	48-60	0.23-0.34	1-2
n		2	2	2	2	2	2	2	2
06012	Ice cream, vanilla flavour, regular fat	117	0.2	12	84	142	64	0.23	1
SD or min-max		93-140	0.1-0.2				48-80		
n		2	2	1	1	1	2	1	1
06013	Ice cream, vanilla flavour, with nuts, regular fat	92	0.2	15	91	157	47	0.3	1
SD or min-max									
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
06	**MILK AND DAIRY PRODUCTS**											
06005	Cheese, cottage (cow milk), plain, whole	35	38	31	44	0.05	0.29	0.5	3	3	0.6	0
SD or min-max												
n				1		1	1	1		1	1	1
06006	Cheese, cottage, Milk, Cow, Sour	37	38	36	12	0.03	0.27	0.1	12	12	0.43	0
SD or min-max												
n				1		1	1	1		1	1	1
06007	Cream, pure, 35% fat	174	184	164	118	0.03	0.12	0	64	64	0.2	0
SD or min-max												
n				1		1	1	1		1	1	1
06008	Ghee (cow milk)	900	940	860	480	0	0.01	0	0	0	0	0
SD or min-max												
n				1	1	1	1	1		1	1	1
06009	Ice cream, caramel flavour, regular fat	166	182	150	190	0	0.29	0.7	10	10	0.1	0
SD or min-max												
n				1		1	1	1		1	1	1
06010	Ice cream, chocolate flavour, regular fat	145	147	143	23	0	0.19	0.2	16	16	0.25	0.7
SD or min-max				47		0	0	0			0	0.2
n				3		3	3	3		2	3	4
06011	Ice cream, strawberry flavour, regular fat	139	155	123	190	0.02	0.27	0.4	11	11	0.2	0
SD or min-max												
n				2		2	2	2		2	2	1
06012	Ice cream, vanilla flavour, regular fat	166	182	150	190	0	0.25	0.7	10	10	0.1	0
SD or min-max												
n				1		1	2	1		1	1	1
06013	Ice cream, vanilla flavour, with nuts, regular fat	162	177	146	186	0	0.29	0.7	11	11	0.1	0
SD or min-max												
n				1		1	1	1		1	1	1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
06	**MILK AND DAIRY PRODUCTS**									
06014	Milk, camel, whole, fresh, raw	1.00	219	52	89.8	2.2	2.8	4.5	0	0.7
SD or min-max										
n					1	1	1			1
06027	Milk, camel, whole, fresh, boiled	1.00	257	62	88	2.6	3.3	5.3	0	0.8
06015	Milk, cow, condensed, skimmed, sweetened, raw	1.00	1210	284	27	9.9	0.2	60.7	0	2.2
n					1	1	1			1
06016	Milk, cow, condensed, whole, sweetened, raw	1.00	1410	335	25.8	8.3	9.2	54.8	0	1.9
n					1	1	1			1
06017	Milk, cow, powder, skimmed	1.00	1530	361	4.1	37.2	0.9	51	0	6.8
SD or min-max						36.4-38				
n					1	2	1			1
06018	Milk, cow, powder, whole	1.00	2070	495	3.2	26.1	26.4	38.4	0	6
SD or min-max					2.9-3.5	25.8-26.3				
n					2	2	1			1
06019	Milk, cow, skimmed, raw	1.00	162	38	89.8	3.5	0.1	5.8	0	0.8
SD or min-max					89.6-90					
n					2	1	1			1
06028	Milk, cow, skimmed, boiled	1.00	190	45	88	4.1	0.1	6.8	0	0.9
06020	Milk, cow, whole, fermented (Lala - Industrial)	1.00	269	65	88.3	2.8	4.1	4.1	0	0.7
SD or min-max										
n					1	1	1			1
06021	Milk, cow, whole, fermented (Lala - mursik)	1.00	243	58	89.1	3.1	3.5	3.6	0	0.8
SD or min-max										
n					1	1	1			1
06022	Milk, cow, whole, fresh, raw	1.00	292	70	86.3	3.3	3.5	6.1	0	0.7
SD or min-max										
n					1	1	1			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
06	**MILK AND MILK PRODUCTS**								
06014	Milk, camel, whole, fresh, raw	56	1.5	16	92	344	119	0.35	2
SD or min-max					73-110				
n		1	1	1	2	1	1	1	1
06027	Milk, camel, whole, fresh, boiled	66	1.7	18	108	404	140	0.41	2
06015	Milk, cow, condensed, skimmed, sweetened, raw	358	0.3	30	300	446	125	1.05	8
SD or min-max		335-380							
n		2	1	1	1	1	1	1	1
06016	Milk, cow, condensed, whole, sweetened, raw	280	0.2	25	255	357	130	0.9	8
SD or min-max									
n		1	1	1	1	1	1	1	1
06017	Milk, cow, powder, skimmed	1290	0.4	115	1000	1602	550	3.83	23
SD or min-max		1200-1370							
n		2	1	1	1	1	1	1	1
06018	Milk, cow, powder, whole	975	0.5	85	730	1157	440	2.97	25
SD or min-max		950-1000	0.4-0.6						
n		2	2	1	1	1	1	1	1
06019	Milk, cow, skimmed, raw	130	0.1	12	109	170	44	0.32	1
SD or min-max			0-0.1		97-120				
n		1	2	1	2	1	1	1	1
06028	Milk, cow, skimmed, boiled	153	0.1	14	128	200	52	0.38	1
06020	Milk, cow, whole, fermented (Lala - Industrial)	100	0.1	10	138	126	36	0.34	3
SD or min-max									
n		1	1	1	1	1	1	1	1
06021	Milk, cow, whole, fermented (Lala - mursik)	65	0.1	5	59	64	22	0.22	0
SD or min-max									
n		1	1	1	1	1	1	1	1
06022	Milk, cow, whole, fresh, raw	119	0.1	11	122	136	39	0.63	3
SD or min-max					88-156				
n		1	1	1	2	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
06	**MILK AND DAIRY PRODUCTS**											
06014	Milk, camel, whole, fresh, raw	15	16	13	18	0.61	0.08	0	8	8	0.6	0
SD or min-max												
n				1		1	1			1		1
06027	Milk, camel, whole, fresh, boiled	16	16	16	0	0.65	0.09	0	8	8	1	0
06015	Milk, cow, condensed, skimmed, sweetened, raw	0	0	0	2	0.1	0.6	0.3	0	0	0.4	2
SD or min-max												
n				1	1	1	1	1		1	1	1
06016	Milk, cow, condensed, whole, sweetened, raw	74	78	70	46	0.1	0.5	0.3	0	0	0.4	1
SD or min-max												
n				1	1	1	1	1		1	1	1
06017	Milk, cow, powder, skimmed	5	5	4	7	0.45	1.64	0.9	54	54	4	2
SD or min-max												
n				1	1	1	1	1		1	1	1
06018	Milk, cow, powder, whole	395	408	383	149	0.34	1.32	0.8	54	54	3.2	3
SD or min-max						0.06	0.3					
n				1	1	3	3	1		1	1	1
06019	Milk, cow, skimmed, raw	0	0	0	1	0.03	0.18	0.1	6	6	0.4	1.0
SD or min-max												
n				1	1	1	1	1		1	1	1
06028	Milk, cow, skimmed, boiled	0	0	0	1	0.03	0.2	0.1	6	6	0	1
06020	Milk, cow, whole, fermented (Lala - Industrial)	34	34	34	0	0	0.2	0	0	tr	0.23	0
SD or min-max												
n				1			1			1	1	
06021	Milk, cow, whole, fermented (Lala - mursik)	41	41	41	0	0	0.27	0	0	tr	0.1	1
SD or min-max												
n				1			1				1	
06022	Milk, cow, whole, fresh, raw	41	43	40	18	0	0.27	0	8	8	0.59	0
SD or min-max												
n				1			1			1	1	

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
06	**MILK AND DAIRY PRODUCTS**									
06029	Milk, cow, whole, fresh, boiled	1.00	344	82	83.8	3.9	4.2	7.2	0	0.9
06023	Milk, goat, fluid, whole, raw	1.00	325	78	85.3	3.5	[4.5]	5.8	0	0.9
SD or min-max					2	0.2	0.5			0.2
n					4	4	4			3
06030	Milk, goat, fluid, whole, boiled	1.00	382	92	82.7	4.1	5.3	6.8	0	1.1
06024	Milk, human/breast, mature, fluid	1.00	303	73	87.2	1.2	4.4	7.1	0	0.2
SD or min-max					0.8	0.1				0.1-0.2
n					3	3	1			2
06025	Milk, sheep, fluid, whole, raw	1.00	391	94	82.8	5.1	5.8	5.2	0	1.1
SD or min-max						4.3-5.9				
n					1	2				1
06031	Milk, sheep, fluid, whole, boiled	1.00	459	110	79.8	6	6.8	6.2	0	1.2
06026	Yoghurt, cow milk, whole, plain	1.00	356	85	82	2.9	3.1	11.3	0	0.7
SD or min-max										
n					1	1	1			1
07	**MEAT, POULTRY AND EGGS**									
07001	Beef, high fat, w/o bones, raw	0.85	1180	284	58.2	18.6	24.1	0	0	0.9
SD or min-max										
n					1	1	1			1
07031	Beef, high fat, w/o bones, boiled (without salt)	0.77	1670	402	39.7	31.1	30.8	0	0	1.4
07032	Beef, high fat, w/o bones, grilled (without salt and fat)	0.80	1480	356	47.4	25.9	28	0	0	1.2
07033	Beef, high fat, w/o bones, stewed (without salt)	0.78	1890	455	34.7	29.1	37.6	0	0	1.4
07002	Beef, lean, raw	0.90	439	104	75.6	20.6	2.3	0.4	0	1.2
n					1	1	1			1
07034	Beef, lean, boiled (without salt)	0.82	884	209	50.3	41.9	4.6	0	0	2.4
07035	Beef, lean, grilled (without salt and fat)	0.87	602	142	66.2	28.5	3.1	0	0	1.6
07036	Beef, lean, stewed (without salt)	0.83	817	194	54	38.8	4.3	0	0	2.2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
06	**MILK AND MILK PRODUCTS**								
06029	Milk, cow, whole, fresh, boiled	140	0.1	13	143	160	45	0.74	3
06023	Milk, goat, fluid, whole, raw	180	0.1	12	128	207	57	0.35	1
SD or min-max		62	0.1		120-135	169-245	21		
n		3	3	1	2	2	3	1	1
06030	Milk, goat, fluid, whole, boiled	211	0.1	14	150	243	68	0.41	1
06024	Milk, human/breast, mature, fluid	32	0	3	15	51	14	0.17	2
SD or min-max		4			11-18				
n		3	1	1	2	1	1	1	1
06025	Milk, sheep, fluid, whole, raw	193	0.1	18	142	175	44	0.54	2
SD or min-max					125-158	137-213			
n		1	1	1	2	2	1	1	1
06031	Milk, sheep, fluid, whole, boiled	227	0.1	21	166	206	52	0.64	2
06026	Yoghurt, cow milk, whole, plain	149	0.2	10	93	130	32	0.34	2
SD or min-max									
n		1	1	1	1	1	1	1	1
07	**MEATS, POULTRY AND EGGS**								
07001	Beef, high fat, w/o bones, raw	16	2.2	12	188	134	83	3	1
SD or min-max									
n		1	1	1	1	1	1	1	1
07031	Beef, high fat, w/o bones, boiled (without salt)	21	3.7	12	203	112	62	5	1
07032	Beef, high fat, w/o bones, grilled (without salt and fat)	20	3	14	235	158	98	4.17	1
07033	Beef, high fat, w/o bones, stewed (without salt)	21	3.5	12	235	105	58	4.69	1
07002	Beef, lean, raw	5	2.3	24	279	241	107	4.22	15
SD or min-max		4-5							
n		2	1	1	1	1	1	1	1
07034	Beef, lean, boiled (without salt)	7	4.7	30	370	246	99	8.62	30
07035	Beef, lean, grilled (without salt and fat)	6	3.1	29	349	285	127	5.87	20
07036	Beef, lean, stewed (without salt)	7	4.4	30	421	228	91	7.97	28

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
06	**MILK AND DAIRY PRODUCTS**											
06029	Milk, cow, whole, fresh, boiled	47	47	47	0	0	0.3	0	8	8	1	0
06023	Milk, goat, fluid, whole, raw	32	32	32	0	0.05	0.19	0.5	1	1	0.35	0.5
SD or min-max												
n				1		2	2	1		1	2	2
06030	Milk, goat, fluid, whole, boiled	38	38	38	0	0.05	0.21	0.5	1	1	0	0
06024	Milk, human/breast, mature, fluid	61	61	60	7	0.02	0.03	0.2	5	5	0.05	4
SD or min-max												1
n				1		2	2	1		1	1	3
06025	Milk, sheep, fluid, whole, raw	81	81	81	tr	0.07	0.36	0.4	7	7	0.7	4
SD or min-max												
n						1	1	1		1	1	1
06031	Milk, sheep, fluid, whole, boiled	95	95	95	0	0.07	0.4	0.4	7	7	1	3
06026	Yoghurt, cow milk, whole, plain	34	36	32	23	0.1	0.2	0.1	0	tr	0.2	tr
SD or min-max												
n				1		1	1			1	1	
07	**MEAT, POULTRY AND EGGS**											
07001	Beef, high fat, w/o bones, raw	29	31	29	13	tr	0.18	3.4	tr	tr	1.63	0.5
SD or min-max												
n				1		1	1	1		1	1	1
07031	Beef, high fat, w/o bones, boiled (without salt)	37	38	35	16	tr	0.23	2.8	tr	tr	2	1
07032	Beef, high fat, w/o bones, grilled (without salt and fat)	31	32	30	14	tr	0.22	3.8	tr	tr	2	1
07033	Beef, high fat, w/o bones, stewed (without salt)	34	36	33	15	tr	0.23	3.2	tr	tr	2	1
07002	Beef, lean, raw	6	7	6	10	tr	0.23	5.2	2	2	2.42	0.5
SD or min-max												
n				1		1	1	1		1	1	1
07034	Beef, lean, boiled (without salt)	10	11	8	15	tr	0.38	5.3	2	2	3	1
07035	Beef, lean, grilled (without salt and fat)	7	7	6	10	tr	0.29	5.8	2	2	3	1
07036	Beef, lean, stewed (without salt)	9	10	8	14	tr	0.37	5.9	2	2	3	1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
07	**MEAT, POULTRY AND EGGS**									
07003	Beef, liver, raw	0.99	506	120	73.9	20	[4.2]	0.7	0	1.3
SD or min-max										
n					1	1	1			1
07037	Beef, liver, boiled (without salt)	0.99	749	178	60.4	30.2	6.4	0	0	2
07004	Beef, medium fat, w/o bones, raw	0.90	632	151	70.3	19.7	7.2	1.8	0	1
SD or min-max										
n					1	1	1			1
07038	Beef, medium fat, without bones, boiled (without salt)	0.84	829	197	55.2	32.8	7.4	0	0	1.7
07039	Beef, medium fat, without bones, grilled (without salt and fat)	0.87	734	175	61.5	27.3	7.3	0	0	1.4
07040	Beef, medium fat, without bones, stewed (without salt)	0.85	939	224	53.6	30.7	11.3	0	0	1.6
07005	Camel blood, raw	1.00	348	42	78.4	15.8	[0.9]	2.7	0	2.2
SD or min-max										
n					1	1	1			1
07006	Camel Meat	1.00	826	197	60.5	18.6	8.9	10.8	0	1.4
SD or min-max					58-63	18.1-19	7.7-10			1.4-1.4
n					2	2	2			2
07007	Cow's blood, raw	1.00	403	95	75	13.8	[0.9]	8.0	0	2.4
SD or min-max										
n					1	1	1			1
07008	Duck, meat and skin, fresh, raw	1.00	1050	253	62.2	17.8	21.2	0	0	1.1
SD or min-max					14.4	4.7	5.5-36.9			1-1.2
n					4	4	2			2
07009	Chicken, unespecified part, w/o bone, meat&skin, raw	0.65	864	207	63.6	18.7	13	3.8	0	0.9
SD or min-max										
n					1	1	1			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
07	**MEATS, POULTRY AND EGGS**								
07003	Beef, liver, raw	6	10.1	17	369	159	75	4.12	17
SD or min-max									
n		1	1	1	1	1	1	1	1
07037	Beef, liver, boiled (without salt)	7	14.6	20	391	145	68	6.25	25
07004	Beef, medium fat, w/o bones, raw	4	12.4	24	280	231	121	3.85	20
SD or min-max									
n		1	1	1	1	1	1	1	1
07038	Beef, medium fat, without bones, boiled (without salt)	5	20.7	24	303	192	91	6.41	34
07039	Beef, medium fat, without bones, grilled (without salt and fat)	5	16.3	28	350	272	143	5.34	28
07040	Beef, medium fat, without bones, stewed (without salt)	5	19.4	24	350	180	85	6.01	32
07005	Camel blood, raw**	[8]	20.6	[6]	33	[114]	313	[0.65]	[12]
SD or min-max									
n		1	1	1	1	1	1	1	1
07006	Camel Meat, raw	4	3.8	13	134	325	49	1.93	9
SD or min-max		4-4	2.6-5		118-150		46-52	1.93-1.93	9-9
n		2	2	1	2	1	2	2	2
07007	Cow's blood, raw**	[14]	18.8	5	20	[199]	469	[1.13]	[21]
SD or min-max									
n		1	1	1	1	1	1	1	1
07008	Duck, meat and skin, fresh, raw	5	1.9	15	167	212	82	1.55	20
SD or min-max		1.5	0.7	10-19	70.1	153-270	18.1	1.09-2	15-25
n		3	4	2	3	2	4	2	2
07009	Chicken, unespecified part, w/o bone, meat&skin, raw	13	2.5	20	243	152	68	0.89	16
SD or min-max									
n		1	1	1	1	1	1	1	1

**values between [ ] were borrowed from an average of blood from other animals

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
07	**MEAT, POULTRY AND EGGS**											
07003	Beef, liver, raw	19534	19601	19466	811	0.23	2.63	9.4	268	268	112.84	14.0
SD or min-max												
n				1		1	1	1		1	1	
07037	Beef, liver, boiled (without salt)	23677	23759	23595	983	0.24	3.50	7.1	264	264	111	15
07004	Beef, medium fat, w/o bones, raw	10	10	9	5	tr	0.21	4.4	2	2	1.90	0.6
SD or min-max												
n				1		1	1	1		1	1	1
07038	Beef, medium fat, without bones, boiled (without salt)	12	13	11	6	tr	0.27	3.7	2	2	2	1
07039	Beef, medium fat, without bones, grilled (without salt and fat)	10	10	10	5	tr	0.26	4.9	3	3	2	1
07040	Beef, medium fat, without bones, stewed (without salt)	11	12	11	6	tr	0.27	4.2	2	2	2	1
07005	Camel blood, raw	[74]	[74]	[74]		[0.04]	[0.05]	[0.2]	-	-	-	-
SD or min-max												
n				1		1	1	1				
07006	Camel Meat	1	2	0	10	0.04	0.2	6.0	8	8	1.70	0.0
SD or min-max												
n				2		2	2	2		2	2	2
07007	Cow's blood, raw	[74]	[74]	[74]		[0.08]	[0.09]	[0.35]	-	-	-	-
SD or min-max												
n				1		1	1	1				
07008	Duck, meat and skin, fresh, raw	39	39	39	0	0.35	0.45	3.51	0	0	0.6	0
SD or min-max												
n				2		2	2	2		2	2	2
07009	Chicken, unespecified part, w/o bone, meat&skin, raw	75	75	75	0	0.14	0.12	6.4	11	11	0.63	1.2
SD or min-max												
n				1		1	1	1		1	1	1

**values between [ ] were borrowed from an average of blood from other animals

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
07	**MEAT, POULTRY AND EGGS**									
07041	Chicken, unspecified part, w/o bone, meat&skin, boiled (without salt)	0.79	942	226	55.7	23.7	14.6	0	0	1.2
07042	Chicken, unspecified part, w/o bone, meat&skin, grilled (without salt and fat)	0.78	951	228	55.2	24.0	14.7	0	0	1.2
07010	Egg, chicken, white (albumen), raw	0.56	206	48	87.2	11.2	0	0.9	0	0.7
SD or min-max										
n					1	1	1			1
07030	Egg, chicken, white (albumin), boiled (without salt)	0.56	206	48	87.2	11.2	0.0	1	0	0.7
07011	Egg, chicken, whole, raw	0.87	558	134	75.9	12.7	[8.1]	2.4	0	0.9
SD or min-max										
n					1	1	1			1
07027	Egg, chicken, whole, boiled (without salt)	0.87	558	134	75.9	12.7	8.1	2	0	0.9
07028	Egg, chicken, whole, poached (without salt)	1.00	634	152	72.6	14.4	9.2	3	0	1.0
07012	Egg, chicken, yolk, raw	0.31	1370	331	51.0	16.1	28.2	3.2	0	1.5
SD or min-max										
n					1	1	1			1
07029	Egg, chicken, yolk, boiled (without salt)	0.31	1370	331	51.0	16.1	28.2	3	0	1.5
07013	Goat blood, raw	1.00	290	69	86.4	3.8	[3.9]	4.9	0	1.1
SD or min-max										
n					1	1	1			1
07014	Goat, lean, raw	0.71	500	119	74.6	19.5	4.3	0.6	0	1.0
SD or min-max										
n					1	1	1			1
07043	Goat, lean, boiled (without salt)	0.62	731	174	62.0	29.1	6.4	0	0	1.6
07044	Goat, lean, grilled (without salt and fat)	0.63	710	169	63.1	28.3	6.2	0	0	1.5
07015	Goat liver, raw	0.99	485	115	74.8	20.2	[3.9]	0	0	1.3
SD or min-max					73.4-76.3	20-20.3	3-4.9			
n					2	2	2			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
07	**MEATS, POULTRY AND EGGS**								
07041	Chicken, unspecified part, w/o bone, meat&skin, boiled (without salt)	14	2.5	18	215	77	34	1.13	21
07042	Chicken, unspecified part, w/o bone, meat&skin, grilled (without salt and fat)	15	2.9	19	249	156	70	1.14	21
07010	Egg, chicken, white (albumen), raw	5	0.1	11	10	119	143	0	11
SD or min-max			0-0.2				110-175		
n		1	2	1	1	1	2	1	1
07030	Egg, chicken, white (albumin), boiled (without salt)	5	0.1	10	10	113	135	0	10
07011	Egg, chicken, whole, raw	54	1.7	14	180	126	155	1.13	23
SD or min-max									
n		1	1	1	1	1	1	1	1
07027	Egg, chicken, whole, boiled (without salt)	51	1.6	13	171	120	147	1.07	21
07028	Egg, chicken, whole, poached (without salt)	58	1.9	15	194	136	167	1.21	24
07012	Egg, chicken, yolk, raw	130	6.0	8	398	104	50	2.5	56
n		1	1	1	1	1	1	1	1
07029	Egg, chicken, yolk, boiled (without salt)	124	5.7	8	378	99	48	2.38	53
07013	Goat blood, raw	[8]	27.2	[6]	23	169	[216]	[0.65]	[12]
SD or min-max									
n		1	1	1	1	1	1	1	1
07014	Goat, lean, raw	10	7.2	29	276	243	156	3.66	22
n		1	1	1	1	1	1	1	1
07043	Goat, lean, boiled (without salt)	12	9.9	34	317	217	137	5.46	33
07044	Goat, lean, grilled (without salt and fat)	14	9.6	35	332	281	189	5.03	32
07015	Goat liver, raw	12	6.6	18	308	225	64	3.48	48
SD or min-max		6-17			279-336	166-284	55-73		
n		2	1	1	2	2	2	1	1

**values between [ ] were borrowed from an average of blood from other animals

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
07	**MEAT, POULTRY AND EGGS**											
07041	Chicken, unspecified part, w/o bone, meat&skin, boiled (without salt)	52	52	52	0	0.1	0.14	4.9	7	7	0	2
07042	Chicken, unspecified part, w/o bone, meat&skin, grilled (without salt and fat)	72	72	72	0	0.11	0.13	6.6	9	9	1	1
07010	Egg, chicken, white (albumen), raw	0	0	0	[0]	0	0.41	0	7	7	0	0
SD or min-max												
n				1		1	1	1		1	1	1
07030	Egg, chicken, white (albumin), boiled (without salt)	0	0	0	0	0	0.33	0	6	6	0	0
07011	Egg, chicken, whole, raw	186	186	186	0	0.12	0.51	0	83	83	1.7	0
SD or min-max												
n				1		1	1			1	1	
07027	Egg, chicken, whole, boiled (without salt)	177	177	177	0	0.09	0.41	0	66	66	1	0
07028	Egg, chicken, whole, poached (without salt)	201	201	201	0	0.1	0.46	0	75	75	2	0
07012	Egg, chicken, yolk, raw	449	449	449	[0]	0.19	0.4	0	120	120	4.0	0
SD or min-max												
n				1		1	1	1		1	1	1
07029	Egg, chicken, yolk, boiled (without salt)	427	427	427	0	0.15	0.32	0	96	96	3	0
07013	Goat blood, raw	-	-	-	-	-	-	-	-	-	-	-
SD or min-max												
n												
07014	Goat, lean, raw	7	7	7	0	0.17	0.23	4.4	2	2	3.09	0.4
SD or min-max												
n				1		1	1	1		1	1	1
07043	Goat, lean, boiled (without salt)	8	8	8	0	tr	0.28	3.8	2	2	3	0
07044	Goat, lean, grilled (without salt and fat)	9	9	9	0	0.17	0.3	5.2	2	2	3	1
07015	Goat liver, raw	15700	15700	15700	0	0.20	0.37	12.9	[178]	[178]	64	14
SD or min-max												
n				1		1	1	1		1	1	1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
07	**MEAT, POULTRY AND EGGS**									
07045	Goat, liver, boiled (without salt)	0.99	740	176	61.9	30.5	6	0	0	2
07016	Goat, medium fat, raw	0.74	695	166	68.2	18.6	8.6	3.5	0	1
SD or min-max										
n					1	1	1			1
07046	Goat, medium fat, boiled (without salt)	0.66	820	196	56	27.8	9.4	0	0	1.5
07047	Goat, medium fat, grilled (without salt and fat)	0.66	804	192	57.1	26.9	9.3	0	0	1.5
07017	Guinea fowl, meat, with skin	1.00	471	112	75.2	20.5	[3.2]	0.1	0	0.9
SD or min-max										
n					1	1	1			1
07018	Lamb liver, raw	1.00	675	161	67.6	20.4	7.5	3.1	0	1.5
SD or min-max					64.8-70.4	19.3-21.4				1.5-1.5
n					2	2	1			2
07048	Lamb, liver, boiled (without salt)	1.00	811	193	54.5	30.8	7.8	0	0	2.3
07019	Lamb, raw (unspecified part)	1.00	1120	269	60	17	[22.7]	0	0	1
SD or min-max					3.6	1	4.7			
n					3	3	3			1
07049	Lamb, unspecified part, boiled (without salt)	1.00	1430	344	47.2	25.4	26.9	0	0	1.5
07050	Lamb, unspecified part, grilled (without salt and fat)	1.00	1400	338	48.3	24.6	26.6	0	0	1.4
07020	Pork, meat, raw (unspecified part)	1.00	1190	286	57.2	18.9	[23.5]	0	0	0.7
SD or min-max					12.3	5.9	23-24			
n					5	5	2			1
07051	Pork, meat, unspecified part, boiled (without salt)	1.00	1550	374	41.8	29.1	28.6	0	0	1.1
07052	Pork, meat, unspecified part, grilled (without salt and fat)	1.00	1480	356	44.9	27.0	27.6	0	0	1.0

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
07	**MEATS, POULTRY AND EGGS**								
07045	Goat, liver, boiled (without salt)	14	9.4	22	326	205	58	5.27	73
07016	Goat, medium fat, raw	10	1.9	22	237	198	121	3.26	26
SD or min-max									
n		1	1	1	1	1	1	1	1
07046	Goat, medium fat, boiled (without salt)	12	2.7	25	273	177	106	4.86	38
07047	Goat, medium fat, grilled (without salt and fat)	14	2.6	26	286	229	147	4.48	37
07017	Guinea fowl, meat, with skin	31	2.2	21	187	240	58	1.48	24
SD or min-max									
n		1	1	1	1	1	1	1	1
07018	Lamb liver, raw	10	8.3	18	413	326	67	4.22	57
SD or min-max		10-10	6.3-10.3		380-446				
n		2	2	1	2	1	1	1	1
07048	Lamb, liver, boiled (without salt)	12	12	22	438	296	61	6.39	86
07019	Lamb, raw (unspecified part)	12	1.7	22	150	230	60	3.33	20
SD or min-max		0.5				50-70			
n		1	3	1	1	1	2	1	1
07049	Lamb, unspecified part, boiled (without salt)	14	2.5	21	179	189	54	4.97	30
07050	Lamb, unspecified part, grilled (without salt and fat)	17	2.3	27	185	283	74	4.83	29
07020	Pork, meat,raw (unspecified part)	25	1.1	13	178	253	58	1.59	28
SD or min-max		19-30	0.6		155-200		16		
n		2	5	1	2	1	4	1	1
07051	Pork, meat, unspecified part, boiled (without salt)	30	1.8	12	164	195	40	2.45	44
07052	Pork, meat, unspecified part, grilled (without salt and fat)	26	1.3	18	228	307	75	2.27	41

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
07	**MEAT, POULTRY AND EGGS**											
07045	Goat, liver, boiled (without salt)	19000	19000	19000	0	0.21	0.49	9.8	175	175	0	0
07016	Goat, medium fat, raw	18	18	18	0	0.16	0.18	3.7	1	1	2.34	0.8
SD or min-max												
n				1		1	1	1		1	1	1
07046	Goat, medium fat, boiled (without salt)	20	20	20	0	0.13	0.22	3.3	1	1	2	1
07047	Goat, medium fat, grilled (without salt and fat)	21	21	21	0	0.16	0.23	4.4	1	1	3	1
07017	Guinea fowl, meat, with skin	2	2	2	0	0.02	0.18	3.6	4	4	0.27	1
SD or min-max												
n				1		1	1	1		1	1	1
07018	Lamb liver, raw	31400	31400	31400	46	0.3	2.25	10.9	759	759	90	20
SD or min-max												
n				1		2	2	1		1	1	2
07048	Lamb, liver, boiled (without salt)	38100	38100	38100	56	0.32	3	8.3	748	748	89	21
07019	Lamb, raw (unspecified part)	0	0	0	0	0.12	0.23	6.1	18	18	2.39	[0]
SD or min-max												
n				1		2	2	1		1	1	2
07049	Lamb, unspecified part, boiled (without salt)	0	0	0	0	0.07	0.18	4.6	16	16	2	0
07050	Lamb, unspecified part, grilled (without salt and fat)	0	0	0	0	0.1	0.29	7.1	18	18	3	0
07020	Pork, meat, raw (unspecified part)	0	0	0	0	0.63	0.17	3.8	4	4	0.6	[0]
SD or min-max						0.07	0.05					
n				1		5	5	1		1	1	
07051	Pork, meat, unspecified part, boiled (without salt)	0	0	0	0	0.29	0.18	2.9	4	4	1	0
07052	Pork, meat, unspecified part, grilled (without salt and fat)	0	0	0	0	0.63	0.21	4.3	5	5	1	0

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
07	**MEAT, POULTRY AND EGGS**									
07021	Rabbit meat, raw	1.00	636	151	67.0	24.4	4.8	2.5	0	1.3
SD or min-max					7.2	2.4	4.9			0.2
n					3	3	3			3
07053	Rabbit meat, stewed (without salt)	1.00	872	207	51.4	35.8	7.1	0	0	2
07054	Rabbit meat, roasted (without salt and fat)	1.00	674	160	62.4	27.7	5.5	0	0	1.5
07022	Sausage, beef, raw	1.00	989	238	57.5	12	[16.3]	9.7	2.2	2.3
SD or min-max										
n					1	1	1		1	1
07055	Sausage, beef, grilled (without salt and fat)	1.00	927	223	48.1	16.1	17	0	3	3
07023	Sausage, frankfurters	1.00	1130	274	60	10	[25]	1.6	1.5	1.9
SD or min-max										
n					1	1	1		1	1
07056	Sausage, frankfurters, boiled (without salt)	1.00	1130	272	59.2	10.3	25.3	0	2	2
07024	Sausage, liver, raw	1.00	1330	322	52	13	28.5	3.4	0	3.1
SD or min-max										
n					1	1	1			1
07057	Sausage, liver, grilled (without salt and fat)	1.00	1530	369	40.7	17.3	33.3	0	0	4.1
07025	Sausage, pork, raw	1.00	1420	343	51	11.5	[32]	1.7	1.3	2.5
SD or min-max					45-57	11-12				
n					2	2	1		1	1
07058	Sausage, pork, boiled (without salt)	1.00	1470	355	48	12.5	33.6	0	1	2.7
07059	Sausage, pork, grilled (without salt and fat)	1.00	1730	419	37.4	16	39	0	2	3.5
07026	Quail, flesh & skin, raw	0.54	729	175	69.7	19.1	11.5	0	0	1
SD or min-max					69.7-69.8	18.5-19.6	11-12.1			0.9-1
n					2	2	2			2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
07	**MEATS, POULTRY AND EGGS**								
07021	Rabbit meat, raw	12	1	18	290	370	53	1.6	25
SD or min-max		4	1-1	10-26	210-370				
n		3	2	2	2	1	1	1	1
07053	Rabbit meat, stewed (without salt)	15	1.5	17	341	299	47	2.35	37
07054	Rabbit meat, roasted (without salt and fat)	13	1.1	17	280	336	51	1.82	28
07022	Sausage, beef, raw	42	1	26	492	279	679	3.42	79
SD or min-max									
n		1	1	1	1	1	1	1	1
07055	Sausage, beef, grilled (without salt and fat)	57	1.6	35	623	316	815	4.55	106
07023	Sausage, frankfurters	78	1.5	11	150	75	1000	2.3	7
SD or min-max		35-120							
n		2	1	1	1	1	1	1	1
07056	Sausage, frankfurters, boiled (without salt)	68	1.5	11	155	66	876	2.37	7
07024	Sausage, liver, raw	30	6.4	12	230	170	900	2.3	58
SD or min-max									
n		1	1	1	1	1	1	1	1
07057	Sausage, liver, grilled (without salt and fat)	40	8.5	16	291	193	1080	3.07	77
07025	Sausage, pork, raw	25	1.1	15	160	160	720	1.7	26
SD or min-max		9-40	1-1.1				690-750		
n		2	2	1	1	1	2	1	1
07058	Sausage, pork, boiled (without salt)	23	1.1	16	174	148	665	1.85	28
07059	Sausage, pork, grilled (without salt and fat)	34	1.5	21	211	189	900	2.36	36
07026	Quail, flesh & skin, raw	10	2.6	24	243	358	49	1.58	16
SD or min-max		6-13	1.3-4	23-24	210-275	216-500	45-53	0.74-2.42	15-17
n		2	2	2	2	2	2	2	2

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
07	**MEAT, POULTRY AND EGGS**											
07021	Rabbit meat, raw	10	10	10	0	0.46	0.06	7.5	11	11	5.3	0
SD or min-max												
n				1		2	1	1		1	1	1
07053	Rabbit meat, stewed (without salt)	12	12	12	0	0.27	0.05	5.5	10	10	5	0
07054	Rabbit meat, roasted (without salt and fat)	9	9	9	0	0.31	0.05	6	10	10	4	0
07022	Sausage, beef, raw	129	134	125	54	0.03	0.1	2.6	9	9	1.42	0
SD or min-max												
n				1		1	1	1		1	1	1
07055	Sausage, beef, grilled (without salt and fat)	155	161	150	65	0.03	0.13	2.9	10	10	2	0
07023	Sausage, frankfurters	9	11	7	24	0.04	0.08	0.9	3	3	1.1	0
SD or min-max												
n				1		1	2	1		1	1	1
07056	Sausage, frankfurters, boiled (without salt)	8	10	6	23	0.03	0.07	0.7	2	2	1	0
07024	Sausage, liver, raw	8310	8310	8310	0	0.2	1.6	4.3	30	30	13.46	0
SD or min-max												
n				1		1	1	1		1	1	1
07057	Sausage, liver, grilled (without salt and fat)	9970	9970	9970	0	0.2	2.03	4.9	34	34	18	0
07025	Sausage, pork, raw	26	27	25	13	0.04	0.12	2.7	21	21	0.6	0
SD or min-max												
n				1		1	2	1		1	1	1
07058	Sausage, pork, boiled (without salt)	26	27	24	13	0.03	0.12	2.2	15	15	0	0
07059	Sausage, pork, grilled (without salt and fat)	33	34	31	16	0.04	0.16	3.2	25	25	1	0
07026	Quail, flesh & skin, raw	47	47	47	0	0.17	0.39	7.1	8	8	0.82	6
SD or min-max												
n				2		2	2	2		1	2	1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
08	**FISH AND SEA FOOD**									
08001	Cod, fillet, raw	0.32	311	73	81.6	17	0.6	0	0	1.2
SD or min-max		0.3-0.3			0.8		0.1			1.2-1.2
n		2			3	1	3			2
08015	Cod, fillet, steamed (without salt)	0.28	380	90	77.5	20.7	0.7	0	0	1.5
08016	Cod, fillet, grilled (without salt and fat)	0.26	415	98	75.5	22.7	0.8	0	0	1.6
08017	Cod, fillet, boiled in recipe (without salt and fat)	0.28	380	90	77.5	20.7	0.7	0	0	1.5
08002	Dagaa fish (omena), dried, raw	1.00	1400	333	11.2	59.5	10.6	0	0	10
SD or min-max										7.2-12.7
n					1	1	1		1	2
08018	Dagaa fish (omena), dried, stewed (without salt)	1.00	638	152	59.6	27.0	4.8	0	0	4.5
08003	Eel, raw	0.67	733	176	69.6	17.7	11.7	0	0	1.41
SD or min-max					68.3-71	17-18.4				
n		1			2	2	1			1
08019	Eel, steamed (without salt)	0.63	830	199	64.8	21.3	12.6	0	0	1.7
08020	Eel, grilled (without salt and fat)	0.61	874	210	62.6	23.0	13.1	0	0	1.8
08021	Eel, boiled in recipe (without salt and fat)	0.63	883	212	63.4	21.3	14.0	0	0	1.7
08004	Herring stock, raw	0.5	480	114	70.8	18.9	[4.3]	0	0	2.6
SD or min-max					1.9	2.2	3.2-5.4			1.7
n					5	5	2		1	4
08022	Herring stock, steamed (without salt)	0.45	578	137	64.9	22.7	5.2	0	0	3.1
08023	Herring stock, grilled (without salt)	0.44	623	148	62.1	24.5	5.6	0	0	3.4
08024	Herring stock, boiled in recipe (without salt and fat)	0.45	578	137	64.9	22.7	5.2	0	0	3.1
08005	Lungfish, fillet, raw	0.91	308	73	80.5	15.9	[1]	0	0	1.1
SD or min-max										
n					1	1	1			1
08025	Lungfish, fillet, steamed (without salt)	0.89	371	88	76.5	19.1	1.2	0	0	1.3
08026	Lungfish, fillet, grilled (without salt and fat)	0.89	400	94	74.7	20.6	1.3	0	0	1.4

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
08	**FISH AND SEAFOOD**								
08001	Cod, fillet, raw	15	0.2	26	209	367	79	0.37	27
SD or min-max		4	0.1	25-27	200-219	360-375	79-80	0.36-0.38	23-30
n		3	3	2	2	2	2	2	2
08015	Cod, fillet, steamed (without salt)	18	0.2	27	217	336	82	0.45	29
08016	Cod, fillet, grilled (without salt and fat)	20	0.2	31	251	416	90	0.49	35
08017	Cod, fillet, boiled in recipe (without salt and fat)	18	0.3	31	255	448	97	0.45	32
08002	Dagaa fish (omena), dried, raw	2790	6.9	98	2730	800	300	16	22
SD or min-max									
n		1	1	1	1	1	1	1	1
08018	Dagaa fish (omena), dried, stewed (without salt)	1270	3.1	44	1240	364	136	7.39	10
08003	Eel, raw	20	0.6	20	216	272	70.5	1.62	6.5
SD or min-max			0.5-0.7				51-90		
n		1	2	1	1	1	2	1	1
08019	Eel, steamed (without salt)	24	0.6	20	221	246	72	1.95	7
08020	Eel, grilled (without salt and fat)	26	0.7	23	252	300	78	2.10	8
08021	Eel, boiled in recipe (without salt and fat)	24	0.7	24	260	328	85	1.95	8
08004	Herring stock, raw	67	1.1	32	250	357	95	0.81	36
SD or min-max		14	0.1	0	37	58	23	0.24	1
n		3	3	3	4	3	3	3	3
08022	Herring stock, steamed (without salt)	80	1.1	33	256	322	97	0.97	39
08023	Herring stock, grilled (without salt)	87	1.3	37	292	394	105	1.05	47
08024	Herring stock, boiled in recipe (without salt and fat)	80	1.4	39	301	430	114	0.97	43
08005	Lungfish, fillet, raw	180	2.6	20	253	168	91	1.12	24
SD or min-max									
n		1	1	1	1	1	1	1	1
08025	Lungfish, fillet, steamed (without salt)	217	2.5	21	259	152	93	1.34	26
08026	Lungfish, fillet, grilled (without salt and fat)	234	2.9	24	296	185	100	1.45	31

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
08	**FISH AND SEA FOODS**											
08001	Cod, fillet, raw	[2]	[2]	2	tr	0.06	0.07	1.8	9	9	1.55	0.5
SD or min-max						0.03	0.03					
n				2		3	3	2		2	2	1
08015	Cod, fillet, steamed (without salt)	2		2	0	0.06	0.06	1.6	8	8	2	0
08016	Cod, fillet, grilled (without salt and fat)	2		2	0	0.07	0.08	2.2	10	10	2	1
08017	Cod, fillet, boiled in recipe (without salt and fat)	2		2	0	0.06	0.08	2.1	10	10	2	1
08002	Dagaa fish (omena), dried, raw	[141]	[141]	141		0.34	0.52	18.2	46	46	60	tr
SD or min-max												
n				1		1	1	1		1	1	
08018	Dagaa fish (omena), dried, stewed (without salt)	58		58	0	0.13	0.24	7.9	18	18	24	0
08003	Eel, raw	[1043]	[1043]	1043	tr	0.2	0.35	3.5	15	15	3	1.8
SD or min-max												
n				1		1	1	1		1	1	1
08019	Eel, steamed (without salt)	880		880	0	0.18	0.3	3	13	13	3	2
08020	Eel, grilled (without salt and fat)	1084		1084	0	0.23	0.41	4.1	16	16	4	2
08021	Eel, boiled in recipe (without salt and fat)	1131		1131	0	0.20	0.42	4	15	15	3	2
08004	Herring stock, raw	[31]	[31]	31	0	0.05	0.23	3.2	8	8	12.22	0
SD or min-max				3		0	0.03	0.95		3	1.95	
n				3		3	3	3		3	3	2
08022	Herring stock, steamed (without salt)	34		34	0	0.05	0.19	2.7	7	7	12	0
08023	Herring stock, grilled (without salt)	36		36	0	0.06	0.27	3.7	8	8	14	0
08024	Herring stock, boiled in recipe (without salt and fat)	34		34	0	0.06	0.28	3.6	8	8	13	0
08005	Lungfish, fillet, raw	[9]	[9]	9	tr		0.28	2.2	2	2	1.64	0.2
SD or min-max												
n				1			1	1		1	1	1
08025	Lungfish, fillet, steamed (without salt)	10		10	0	0	0.24	1.8	2	2	2	0
08026	Lungfish, fillet, grilled (without salt and fat)	11		11	0	0	0.33	2.5	2	2	2	0

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
08	**FISH AND SEA FOOD**									
08027	Lungfish, fillet, boiled in recipe (without salt and fat)	0.89	371	88	76.5	19.1	1.2	0	0	1.3
08006	Mudfish (kamongo), fillet, raw	0.40	431	102	78.3	17.8	3.5	0	0	1.2
SD or min-max										
n					1		1		1	1
08028	Mudfish (kamongo), fillet, steamed (without salt)	0.36	520	123	73.8	21.5	4.2	0	0	1.4
08029	Mudfish (kamongo), fillet, grilled (without salt and fat)	0.34	560	133	71.8	23.2	4.5	0	0	1.5
08030	Mudfish (kamongo), fillet, boiled in recipe (without salt and fat)	0.36	520	123	73.8	21.5	4.2	0	0	1.4
08007	Mackerel, raw	0.62	534	127	76.8	18.7	5.9	0	0	1.3
SD or min-max							0.5			0.2
n					1	1	4			4
08008	Nile perch, dry, raw		1634	388	12.2	71.8	[10.7]	1.2	0	4.2
SD or min-max										
n					1	2	2			1
08009	Nile perch, fillet w/o bones, raw	0.69	356	84	77.37	19	[0.9]	0	0	1.2
SD or min-max										
n		1			1	1	1			1
08010	Nile tilapia, fillet, w/o skin and bones, raw	0.58	391	92	77.6	19.7	[1.5]	0	0	1.1
SD or min-max										
n		1			1	1	1			1
08011	Prawns, flesh, raw	0.51	419	99	75.1	18.4	1.1	3.9	0	1.6
SD or min-max		0.5-0.6			75-75.1	0.8				1.6-1.6
n		2			2	3	1			2
08031	Prawns, fresh, steamed (without salt)	0.46	505	119	69.9	22.2	1.3	5	0	1.9
08032	Prawns, fresh, grilled (without salt and fat)	0.47	487	115	71.0	21.4	1.3	4	0	1.9
08033	Prawns, fresh, boiled in recipe (without salt and fat)	0.46	505	119	69.9	22.2	1.3	5	0	1.9

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
08	**FISH AND SEAFOOD**								
08027	Lungfish, fillet, boiled in recipe (without salt and fat)	217	3.2	24	305	202	109	1.34	28
08006	Mudfish (kamongo), fillet, raw	23	0.5	24	180	301	41	1.07	38
SD or min-max									
n		1	1	1	1	1	1	1	1
08028	Mudfish (kamongo), fillet, steamed (without salt)	28	0.5	24	184	272	42	1.29	41
08029	Mudfish (kamongo), fillet, grilled (without salt and fat)	30	0.6	28	210	333	45	1.39	49
08030	Mudfish (kamongo), fillet, boiled in recipe (without salt and fat)	28	0.7	29	217	363	49	1.29	46
08007	Mackerel, raw	23	0.9	33	215	395	66	0.52	48
SD or min-max		14	0.5	3	13	65	11	0.11	14
n		4	4	4	4	4	4	4	4
08008	Nile perch, dry, raw	516	4	112	1092	859	376	2	84
n		1	1	1	1	1	1	1	1
08009	Nile perch, fillet w/o bones, raw	133	1.0	29	282	222	97	0.56	22
SD or min-max									
n		1	1	1	1	1	1	1	1
08010	Nile tilapia, fillet, w/o skin and bones, raw	109	2.7	17	167	151	64	0.5	17
SD or min-max									
n		1	1	1	1	1	1	1	1
08011	Prawns, flesh, raw	59	1.5	43	246	252	191	1.43	42
SD or min-max			1.4-1.6		227-265				
n		1	2	1	2	1	1	1	1
08031	Prawns, fresh, steamed (without salt)	71	1.4	44	252	228	196	1.72	45
08032	Prawns, fresh, grilled (without salt and fat)	69	1.7	50	286	293	223	1.66	48
08033	Prawns, fresh, boiled in recipe (without salt and fat)	71	1.5	47	267	258	196	1.72	50

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
08	**FISH AND SEA FOODS**											
08027	Lungfish, fillet, boiled in recipe (without salt and fat)	10	10	10	0	0	0.34	2.5	2	2	2	0
08006	Mudfish (kamongo), fillet, raw	9	9	9	tr	0.07	0.03	3.0	14	14	3.5	tr
SD or min-max												
n				1		1	1	1		1	1	
08028	Mudfish (kamongo), fillet, steamed (without salt)	10	10	10	0	0.06	0.03	2.6	11	11	3	0
08029	Mudfish (kamongo), fillet, grilled (without salt and fat)	11	11	11	0	0.08	0.04	3.5	14	14	4	0
08030	Mudfish (kamongo), fillet, boiled in recipe (without salt and fat)	10	10	10	0	0.07	0.04	3.5	14	14	4	0
08007	Mackerel, raw	25	25	25	0	0.1	0.15	2.9	1	1	3.9	1.8
SD or min-max				17		0.03	0.03	1		1	2.6	1.6-2
n				4		4	4	4		3	3	2
08008	Nile perch, dry, raw	186	186	186	tr	tr	tr	8	28	28	5	tr
SD or min-max												
n				1		1	1	1	1	1	1	1
08009	Nile perch, fillet w/o bones, raw	15	15	15	tr	tr	tr	2.0	7	7	1.30	tr
SD or min-max												
n				1				1		1	1	
08010	Nile tilapia, fillet, w/o skin and bones, raw	10	10	10	tr	0.04	0.15	3.23	5	5	1.51	tr
SD or min-max												
n				1			1	1		1	1	
08011	Prawns, flesh, raw	16	20	11	56	0.04	0.08	2.7	14	14	2.14	0.3
SD or min-max												
n				1	1	2	2	1		1	1	2
08031	Prawns, fresh, steamed (without salt)	16		11	56	0.03	0.07	2.2	11	11	2	0
08032	Prawns, fresh, grilled (without salt and fat)	16		11	58	0.04	0.10	2.9	13	13	2	0
08033	Prawns, fresh, boiled in recipe (without salt and fat)	16		11	59	0.04	0.09	2.9	13	13	2	0

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
08	**FISH AND SEA FOOD**									
08012	Sardine, flesh, raw	0.60	605	145	71.2	19.5	[7.4]	0.0	0	2.1
SD or min-max					2.5	0.9	2.4			0.6
n		1	1	1	11	11	10			10
08034	Sardine, fresh, steamed (without salt)	0.56	666	159	67.4	23.0	7.4	0	0	2.5
08035	Sardine, fresh, grilled (without salt and fat)	0.52	733	175	63.2	26.8	7.5	0	0	2.9
08036	Sardine, fresh, boiled in recipe (without salt and fat)	0.56	712	170	66.2	23.0	8.7	0	0	2.5
08013	Shark, raw	0.67	398	94	74.4	21.6	[0.8]	0	0	1.1
SD or min-max					72.8-76					1.1-1.2
n		1	1	1	2	1	1			2
08037	Shark, steamed (without salt)	0.63	479	113	69.2	26.0	1.0	0	0	1.4
08038	Shark, grilled (without salt and fat)	0.61	517	122	66.8	28.1	1.1	0	0	1.5
08039	Shark, boiled in recipe (without salt and fat)	0.63	479	113	69.2	26.0	1.0	0	0	1.4
08014	Tuna, raw	0.58	500	118	68.9	25	2	0	0	1.5
SD or min-max					7.6	1.5	2.5			0.3
n					4	4	3			3
08040	Tuna, steamed (without salt)	0.52	625	148	61.1	31.2	2.5	0	0	1.8
08041	Tuna, grilled (without salt and fat)	0.51	675	160	57.9	33.8	2.7	0	0	2.0
08042	Tuna, boiled in recipe (without salt and fat)	0.52	625	148	61.1	31.2	2.5	0	0	1.8
09	**OILS AND FAT**									
09001	Animal fat/ lard	1.00	3660	890	1	0	99	0	0	0.3
SD or min-max						0	0.5			0-0.5
n					1	3	3			2
09002	Corn oil	1.00	3700	900	0	0	99.9	0.1	0	0
SD or min-max										
n					1	1	1		1	1
09003	Fish liver oil	1.00	3700	900	0	0	100	0	0	0
SD or min-max										
n					1	1	1			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
08	**FISH AND SEAFOOD**								
08012	Sardine, flesh, raw	42	1.3	36	256	364	38	1.2	50
SD or min-max			0.5	24-47	58	228-499		0.89-1.57	
n		1	3	2	3	2	1	2	1
08034	Sardine, fresh, steamed (without salt)	50	1.2	36	256	321	38	1.45	53
08035	Sardine, fresh, grilled (without salt and fat)	58	1.5	44	316	423	45	1.68	69
08036	fat)	50	1.6	42	301	428	45	1.45	59
08013	Shark, raw	8	0.38	32.58	263	372	63.63	0.46	28.9
SD or min-max									
n		1	1	1	2	1	1	1	1
08037	Shark, steamed (without salt)	10	0.4	33	269	336	65	0.55	31
08038	Shark, grilled (without salt and fat)	11	0.4	38	307	411	70	0.6	38
08039	Shark, boiled in recipe (without salt and fat)	10	0.5	39	316	448	77	0.55	35
08014	Tuna, raw	5	0.8	41	266	379	50	0.46	73
SD or min-max		2	0.2	8	12	110	14	0.13	32
n		3	3	3	3	3	3	3	3
08040	Tuna, steamed (without salt)	7	0.8	44	283	355	53	0.57	83
08041	Tuna, grilled (without salt and fat)	7	1	50	324	435	57	0.62	99
08042	Tuna, boiled in recipe (without salt and fat)	7	1	52	333	474	63	0.57	92
09	**OILS AND FATS**								
09001	Animal Fat/ Lard	1	0.1	0	3	1	2	0.11	0
SD or min-max		0-1							
n		2	1	1	1	1	1	1	1
09002	Corn oil	0	0	0	0	0	0	0.01	0
SD or min-max									
n		1	1	1	1	1	1	1	1
09003	Fish liver oil	0	0	0	0	0	0	0	0
SD or min-max									
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
08	**FISH AND SEA FOODS**											
08012	Sardine, flesh, raw	[13]	[13]	13	tr	0.01	0.05	0.91	23	[23]	0.5	tr
SD or min-max							0.01					
n				1		1	3	1		1		
08034	Sardine, fresh, steamed (without salt)	10		10	0	0.01	0.04	0.7	19	19	0	0
08035	Sardine, fresh, grilled (without salt and fat)	14		14	0	0.01	0.06	1.1	25	25	1	0
08036	Sardine, fresh, boiled in recipe (without salt and fat)	13		13	0	0.01	0.06	1	23	23	1	0
08013	Shark, raw	[1]	[1]	1.1	tr	0.03	0.04	2.68	3	3	1.49	tr
SD or min-max												
n				1		1	1	1		1		
08037	Shark, steamed (without salt)	1		1	0	0.03	0.03	2.3	3	3	1	0
08038	Shark, grilled (without salt and fat)	1		1	0	0.04	0.05	3.1	3	3	2	0
08039	Shark, boiled in recipe (without salt and fat)	1		1	0	0.03	0.05	3.1	3	3	2	0
08014	Tuna, raw	[18]	[18]	18	tr	0.16	0.15	16.3	3	3	4.6	tr
SD or min-max						0.07	0.09	6.9		1	4.2	
n				1		3	3	3		3	3	
08040	Tuna, steamed (without salt)	20		20	0	0.15	0.13	14.3	2	2	5	0
08041	Tuna, grilled (without salt and fat)	22		22	0	0.2	0.18	19.9	3	3	6	0
08042	Tuna, boiled in recipe (without salt and fat)	20		20	0	0.17	0.18	19.4	3	3	5	0
09	**OILS AND FATS**											
09001	Animal Fat/ Lard	0	0	0	0	0	0	0	0	0	0	0
SD or min-max						0				0		0
n				2		3	2	2		3	2	3
09002	Corn oil	6	6	6.38	0	0	0	0	0	0	0	0
SD or min-max												
n					0	1	1	1		1		1
09003	Fish liver oil	30000	30000	30000	tr	0	0	0	0	0	0	0
SD or min-max												
n				1		1	2	2		2	2	3

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
09	**OILS AND FAT**									
09004	Margarine,20% fat	1.00	728	177	78.8	0	19.5	0.4	0	1.3
SD or min-max										
n		1			1	1	1		1	1
09005	Margarine,60% fat	1.00	2230	541	37.7	0.3	59.8	0.5	0	1.7
SD or min-max					0.9	0.3	0.6		0	0.1
n		1			3	3	3		3	3
09006	Margarine,80% fat	1.00	3070	748	15	0.1	[83]	0	0	1.9
SD or min-max						0.1			0-0	1.8-1.9
n		1			1	3	1		2	2
09007	Mustard seed oil	1.00	3700	900	0	0	100	0.0	0	0
SD or min-max										
n		1			1	1	1		1	1
09008	Olive oil	1.00	3700	900	0	0	100	0	0	0
SD or min-max										
n		1			1	1	1		1	1
09009	Peanut oil	1.00	3700	900	0	0	100	0	0	0
SD or min-max										
n		1			1	1	1		1	1
09010	Red palm oil	1.00	3660	891	1	0	99	0	0	0.1
SD or min-max					1-1	0-0	99-99			0.1
n		1			2	2	2		1	3
09011	Shortening, commercial, vegetable fat	1.00	3700	900	0	0.1	100	0	0	0
SD or min-max					0-0	0-0.2	99-100		0-0	0-0
n		1			2	2	2		2	2
09012	Soya bean oil	1.00	3700	900	0	0	100	0	0	0
SD or min-max										
n		1			1	1	1		1	1
09013	Sun flower oil	1.00	3700	900	0	0	100	0	0	0
SD or min-max										
n		1			1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
09	**OILS AND FATS**								
09004	Margarine,20% fat	0	0	1	14	25	733	0	0
SD or min-max									
n		1	1	1	1	1	1	1	1
09005	Margarine,60% fat	21	0	2	16	30	700	0	0
SD or min-max		0	0	0	0	0	85	0	0
n		3	3	3	3	3	3	3	3
09006	Margarine,80% fat	10	0	2	10	5	300	0	0
SD or min-max				1-3				0-0	0-0
n		1	1	2	1	1	1	2	2
09007	Mustard seed oil	0	0	0	0	0	0	0	0
SD or min-max									
n		1	1	1	1	1	1	1	1
09008	Olive oil	0	0	0	1	0	0	0.01	0
SD or min-max									
n		1	1	1	1	1	1	1	1
09009	Peanut oil	0	0.1	1	3	0	0	0.1	0
SD or min-max									
n		1	1	1	1	1	1	1	1
09010	Red palm oil	6	0	0	7	0	0	0	0
SD or min-max		6-6	0-0	0-0	7-7	0-0			
n		2	2	2	2	2	1	1	1
09011	Shortening, commercial, vegetable fat	1	0	0	0	1	1	0.02	0
SD or min-max		0-1	0-0	0-0	0-0	0-1	0-1	0-0.04	0-0
n		2	2	2	2	2	2	2	2
09012	Soya bean oil	0	0	0	0	0	0	0	0
SD or min-max									
n		1	1	1	1	1	1	1	1
09013	Sun flower oil	0	0	0	0	0	0	0.01	0
SD or min-max									
n		1	1	1	1	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
09	**OILS AND FATS**											
09004	Margarine,20% fat	819	870	768	610	0	0	0	0	0	0	0
SD or min-max												
n						1	1	1		1	1	1
09005	Margarine,60% fat	819	870	768	610	0.01	0.03	0	1	1	3.65	0.1
SD or min-max						0	0	0		0		0
n					0	3	3	3		3		3
09006	Margarine,80% fat	819	870	768	610	0	0	0	1	1	0.06	0.15
SD or min-max										0.6	0.05	
n				2		1	1	2		3	3	2
09007	Mustard seed oil	0	0	0	0	0	0	0	0	0	0	0
SD or min-max												
n						1	1	1		1		1
09008	Olive oil	1	2	0	11	0	0	0	0	0	0	0
SD or min-max												
n						1	1	1		1		1
09009	Peanut oil	0	0	0	0	0	0	0	0	0	0	0
SD or min-max												
n						1	1	1		1		1
09010	Red palm oil	5490	11000	0	65800	0.01	0.02	0	0	0	0	0
SD or min-max												
n				1		1	1	1		1		1
09011	Shortening, commercial, vegetable fat	0	0	0	0	0	0	0.1	0	0	0	0
SD or min-max												
n					0	2	2	2		2	2	2
09012	Soya bean oil	3	3	2.66	0	0	0	0	0	0	0	0
SD or min-max												
n					0	1	1	1		1		1
09013	Sun flower oil	0	0	0	0	0	0	0	0	0	0	0
SD or min-max												
n				1		1	1	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
10	**NUTS AND SEEDS**									
10001	Bambara groundnuts, dried, raw		1340	321	9.5	18.1	6	34.6	28.2	3.6
SD or min-max					1.2	1.5	5.5-6.5		2.9	0.3
n					4	4	2		4	4
10002	Coconut, fresh, mature fruit, flesh	0.48	1740	423	37.1	4.4	39	8.5	10.1	1
SD or min-max					36.3-37.8	4.2-4.5				1-1
n					2	2	1		1	2
10003	Coconut, fresh, young or immature, flesh	1.00	736	176	68.0	2	10.8	17.3	1	0.9
SD or min-max										
n					1	1	1		1	1
10004	Coconut meat, dried (desiccated)	1.00	2730	663	4.3	6.7	63.7	7.6	16.1	1.6
SD or min-max						6.6-6.8				0.4
n					1	2	1		1	4
10005	Jack fruit, seed, mature, dry, raw	1.00	654	156	51.8	4.8	0.6	24.4	16.8	1.5
SD or min-max										
n					1	1	1		1	1
10006	Mustard Seeds, Dry, Raw	1.00	2160	522	8.2	18.8	[39.7]	15.5	13.7	4.2
SD or min-max					7.8-8.5	17.5-20				
n					2	2	1		1	1
10007	Nut, almond, with or without skin, raw, unsalted	1.00	2530	612	4.6	20.2	52.8	8.6	11.0	2.9
SD or min-max					0.35	1.5	49.9-55.6		3.1	0.2
n					3	3	2		3	3
10008	Nut, cashew, dry, raw, unsalted	1.00	2470	595	5.9	16.5	48	21.5	5.8	2.3
SD or min-max					4.3-7.6	15.6-17.4				2.3-2.4
n					2	2	1		1	2
10009	Nut, ground nut, with skin, unsalted, dry, raw	1.00	2450	593	5.9	20.1	48.4	15	8.3	2.3
SD or min-max										
n					1	1	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
10	**NUTS AND SEEDS**								
10001	Bambara groundnuts, dried, raw	39	3.3	166	190	1330	2	1.81	
SD or min-max		5	1.7	12	35	108	0	0.22	
n		4	4	4	4	4	4	4	
10002	Coconut, fresh, mature fruit, flesh	18	2.3	47	146	125	29	0.73	3
SD or min-max		7	0.5		82				
n		3	3	1	3	1	1	1	1
10003	Coconut, fresh, young or immature, flesh	34.7	1.2	35	56	266	12	0.42	4
SD or min-max									
n		1	1	1	1	1	1	1	1
10004	Coconut meat, dried (desiccated)	25.7	2.7	88.8	210	536	36.5	2.0	3
SD or min-max									
n		1	1	1	1	1	1	1	1
10005	Jack fruit, seed, mature, dry, raw	84	5.9	126	205	463	8	1.56	1
SD or min-max		50-117			97-313	246-681			
n		2	1	1	2	2	1	1	1
10006	Mustard seeds, dry, raw	433	16	220	587	380	2	3.9	70
SD or min-max		375-490	13.9-17.9		474-700				
n		2	2	1	2	1	1	1	1
10007	Nut, almond, with or without skin, raw, unsalted	249	4.1	283	469	724	1	3.44	4
SD or min-max		21	0.5	31	20	22	1-2	0.29	1
n		3	3	3	3	3	2	3	3
10008	Nut, cashew, dry, raw, unsalted	33	4.9	244	578	536	11	5.36	32
SD or min-max									
n		1	1	1	1	1	1	1	1
10009	Nut, ground nut, with skin, unsalted, dry, raw	117	5.5	225	232	630	1	2.24	12
SD or min-max		25	3.9	125-325	75	215	0		
n		3	3	2	3	3	3	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
10	**NUTS AND SEEDS**											
10001	Bambara groundnuts, dried, raw	0	0	0	tr	0.04	0.07	2.3			0	tr
SD or min-max						0	0					
n				1		4	4	1				1
10002	Coconut, fresh, mature fruit, flesh	0	0	0	0	0.08	0.08	1	14	14	0	2.6
SD or min-max												
n				1		1	1	1		1		1
10003	Coconut, fresh, young or immature, flesh	0	0	0	0	0.03	0.6	1.2	20	20	0	5.8
SD or min-max												
n				1		1	1	1		1		1
10004	Coconut meat, dried, (desiccated)	0	0	0	0	0.08	0.1	0.6	9	9	0	2
SD or min-max												
n						1	1	1		1		1
10005	Jack fruit, seed, mature, dry, raw	0	0	0	0	0.15	0.07	0.6	148	148	0	4.3
SD or min-max												
n				1		1	1	1		1		1
10006	Mustard Seeds, Dry, Raw	3	6	0	37	0.65	0.26	3.7	75	75	0	0
SD or min-max												
n				1		1	1	1				1
10007	Nut, almond, with or without skin, raw, unsalted	1	2	0	9	0.18	0.93	3.7	37	37	0	0.2
SD or min-max						0.03	0.6	0.1				0.4
n				2		3	3	3		2		3
10008	Nut, cashew, dry, raw, unsalted	1	1	0	6	0.65	0.25	1.8	24	24	0	0
SD or min-max												
n				1		1	1	1		1		1
10009	Nut, ground nut, with skin, unsalted, dry, raw	0	1	0	4	0.85	0.14	15	110	110	0	0
SD or min-max												
n				1		1	1	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
10	**NUTS AND SEEDS**									
10010	Nut, macadamia, raw, unsalted	0.27	2860	696	7.7	6.8	70.9	2	11.2	1.4
SD or min-max										
n					1	1	1		1	1
10011	Nut, pistachio, raw, unsalted	1.00	2450	591	4.2	21	48	13.8	10.1	3
SD or min-max					0.4	1.6	45.3-50.6		0.9	0
n					4	4	2		3	3
10012	Peanut Butter	1.00	2450	593	5.9	20.1	48.4	15	8.3	2.3
SD or min-max										
n					1	1	1		1	1
10013	Seed, pumpkin, hulled & dried, unsalted	1.00	2380	575	8	24.3	47.6	9.6	5.8	4.7
SD or min-max										
n					1	1	1		1	1
10014	Seed, sesame (sim sim) unsalted, dry, raw	1.00	2490	602	4.9	15.3	54.1	6.4	14.3	5
SD or min-max										
n					1	1	1		1	1
10015	Seed, sunflower, unsalted, dry, raw	0.52	2460	595	5.9	18.5	49.9	14.7	10.6	2.5
SD or min-max					0.7	5				
n					3	3	1		1	1
10016	Water Melon, Seed Kernel, Dry, Raw	1.00	2450	590	5	30	47.5	7.6	6	3.7
SD or min-max					0.8	25.8-34.1	47.4-47.7			3.7-3.7
n					3	2	2		1	2
11	**SUGAR AND SWEETENED PRODUCTS**									
11001	Honey, Raw	1.00	1370	322	19.2	0.4	0	80.1	0	0.3
n					1	1	1		1	1
11002	Sugarcane, Juice, Raw	1.00	159	37	90.2	0.1	[0.2]	8.5	0.6	0.4
n					1	1	1		1	1
11003	Sugar, white, granulated or lump	1.00	1700	400	0	0	0	100	0	0
SD or min-max							0		0	0
n					1	1	4		4	4

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
10	**NUTS AND SEEDS**								
10010	Nut, macadamia, raw, unsalted	44	2.2	100	276	308	5	1.3	10
SD or min-max									
n		1	1	1	1	1	1	1	1
10011	Nut, pistachio, raw, unsalted	116	4.8	132	503	1030	5	2.07	6
SD		23	1.4	27	25	60	3	0.49	5
n		4	4	4	4	4	4	4	3
10012	Peanut Butter	117	5.5	225	232	630	1	2.24	12
SD or min-max		25	3.9	125-325	75	215	0		
n		3	3	2	3	3	3	1	1
10013	Seed, pumpkin, hulled & dried, unsalted	50	5.5	519	1140	796	19	7.24	9
SD or min-max									
n		1	1	1	1	1	1	1	1
10014	Seed, sesame (sim sim) unsalted, dry, raw	1430	9.7	333	803	322	7	1.72	21
SD or min-max		183	2.5	128	80	255	7-8		
n		5	5	5	6	5	2	1	1
10015	Seed, sunflower, unsalted, dry, raw	98	5.0	362	670	450	0	6	61
SD or min-max									
n		1	1	1	1	1	1	1	1
10016	Water Melon, Seed Kernel, Dry, Raw	69	7.1	513	706	433	99	3.4	10
SD or min-max		27	0.5	2.89	474-937		0		
n		3	3	3	2	1	3	1	1
11	**SUGAR AND SWEETENED PRODUCTS**								
11001	Honey, Raw	11	0.6	3	4	74	17	3	
n		1	1	1	1	1	1	1	1
11002	Sugarcane, Juice, Raw	10	1.1	13	22	150	1	0.14	0
n		1	1	1	1	1	1	1	0
11003	Sugar, white, granulated or lump	0	0	0	0	0	0	0	1
SD or min-max								0	0
n		1	1	1	1	1	1	4	4

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
10	**NUTS AND SEEDS**											
10010	Nut, macadamia, raw, unsalted	0	0	0	0	0.27	0.1	2	114	114	0	4.6
SD or min-max												
n				1		1	1	1		1		1
10011	Nut, pistachio, raw, unsalted	16	31	0	187	0.81	0.17	1.2	63	63	0	1.4
SD or min-max				0-0		0.17	0.1	0.3		16		2.8
n				2		4	4	4		3		4
10012	Peanut Butter	0	1	0	4	0.85	0.14	15	110	110	0	0
SD or min-max												
n				1		1	1	1		1		1
10013	Seed, pumpkin, hulled & dried, unsalted	19	38	0	[228]	0.33	0.16	1.6	56	56	0	1.9
SD or min-max												
n				1		1	1	1		1		1
10014	Seed, sesame (sim sim) unsalted, dry, raw	0	1	0	5	1.01	0.34	5.1	103	103	0	0
SD or min-max												
n						1	1	1		1		1
10015	Seed, sunflower, unsalted, dry, raw	1	1	0	7	0.86	0.2	14.2	224	224	0	0
SD or min-max												
n					1	1	1	1		1		1
10016	Water Melon, Seed Kernel, Dry, Raw	tr	tr	0	tr	0.12	0.2	3.1	58	58	0	0
SD or min-max							0.08	0.85		0		
n						2	3	3		3		2
11	**SUGAR AND SWEETENED PRODUCTS**											
11001	Honey, Raw	0	0	0	0	0	0	0	0	0	0	0
n				1		1	1	1		1		1
11002	Sugarcane, Juice, Raw	1	2	0	10.34	0.03	0.04	0.1	45	[45]	0	6.7
n				1	1	1	1	1		1		1
11003	Sugar, white, granulated or lump	0	0	0	0	0	0	0	0	0	0	0
SD or min-max				0								0
n				4	0	1	1	1		1		4

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
12	**BEVERAGES**									
12001	Beef, broth	1.00	26	6	98.1	0.9	0.3	0	0	0.7
SD or min-max					1	1.2	0.4		0	0
n					3	3	3		3	3
12002	Coconut, fresh, water	1.00	98	23	93.9	0.8	0.1	4.8	0	0.4
SD or min-max					93.8-94	0.2-1.4	0-0.1		0-0	0.3-0.5
n					2	2	2		2	2
12003	Coffee, instant, dry powder or granules	1.00	1310	311	3.1	16.1	1	50.4	20	9.9
SD or min-max					2.7-3.4					
n					2	1	1		1	1
12004	Drinking chocolate, powder	1.00	2260	541	1.0	4.4	30.9	60.4	2	1.4
SD or min-max							30.6-31.1			
n					1	1	2		1	1
12005	Tea, chai, instant dry powder	1.00	1270	299	5.1	20.2	0	50.2	8.5	16.0
SD or min-max					5.1-5.1	20.2-20.2			8.5-8.5	16-16
n					2	2	2		2	2
12006	Water, tap	1.00	0	0	99.95	0	0	0	0	0.05
SD or min-max					99.9-100	0-0	0-0		0-0	0-0.1
n					2	2	2		2	2
12007	Wine, Red	1.00	306	74	88.4	0.2	0	1.8	0	0.3
SD or min-max					87.9-88.8	0.2-0.2				
n					2	2	2		1	1
12008	Wine, White, Dry	1.00	313	76	88.7	0.1	0	0.7	0	0.2
SD or min-max					88.2-89.1	0.1	0			
n					2	3	3		2	1
12009	Wine, White, Sweet	1.00	391	94	84.0	0.2	0	5.4	0	0.2
SD or min-max					80.6-87.4	0.2-0.2	0			
n					2	2	3		2	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
12	**BEVERAGES**								
12001	Beef, broth	4	0	4	56	144	266	0.03	1
SD or min-max		1	0	3			113	0.03	0
n		3	3	3	1	1	3	3	3
12002	Coconut, fresh, water	24	0.2	11	14	130	5	0.13	1
SD or min-max		24-24	0.1-0.3	11-11	10-18			0.09-0.16	1-1
n		2	2	2	2	1	1	2	2
12003	Coffee, instant, dry powder or granules	145	3.9	350	320	3690	83	0.71	9
SD or min-max		140-150	3.1-4.6	330-370	310-330	3600-3780	81-84	0.32-1.1	9-9
n		2	2	2	2	2	2	2	2
12004	Drinking chocolate, powder	60	2.0	98	128	591	120	1.55	3
SD or min-max									
n		1	1	1	1	1	1	1	1
12005	Tea, chai, instant dry powder	118	2.3	272	239	6040	72	1.70	15
SD or min-max		118-118	2.3-2.3	272-272	239-239	6040-6040	72-72	1.69-1.7	5-25
n		2	2	2	2	2	2	2	2
12006	Water, tap	3	0	1	0	1	3	0	0.2
SD or min-max		2-3	0-0	1-1	0-0	0-1	3-3	0-0	0-0.3
n		2	2	2	2	2	2	2	2
12007	Wine, Red (9.4 % alcohol)	8	0.3	11	16	89	10	0.07	1
SD or min-max		7-8	0.2-0.4	10-11	14-17	89-89	8-11	0.06-0.07	
n		2	2	2	2	2	2	2	1
12008	Wine, White, Dry (10.3 % alcohol)	8	0.5	8	12	54	14	0.08	1
SD or min-max		7-9		8-8	6-18	46-61	4-24		
n		2	1	2	2	2	2	1	1
12009	Wine, White, Sweet (10.2 % alcohol)	10	0.6	9	16	81	20	0.08	1
SD or min-max		6-14		6-11	13-18	51-110	13-26		
n		2	1	2	2	2	2	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
12	**BEVERAGES**											
12001	Beef, broth	1	1	0.67	0	0.01	0.03	0.4	2	2	0	0.0
SD or min-max						0.02	0.04	0.66				0
n						3	3	3		1		3
12002	Coconut, fresh, water	0	0	0	0	0.01	0.05	0.1	14	14	0	[2.5]
SD or min-max												
n						2	2	2		2		2
12003	Coffee, instant, dry powder or granules	0	0	0	0	0	1	42.9	13	13	0	2
SD or min-max												
n				1		2	2	2		2		2
12004	Drinking chocolate, powder	61	62	60	9	0.03	0.15	0.5	6	6	0	1
SD or min-max												
n				1		1	1	1		1		1
12005	Tea, chai, instant dry powder	0	0	0	1	0	0.99	10.8	103	103	0	0
SD or min-max							0.99-0.99	10.8-10.8		103-103		0-0
n						2	2	2		2		2
12006	Water, tap	0	0	0	0	0	0	0	0	0	0	0
SD or min-max				0-0		0-0	0-0	0-0	0-0		0-0	0-0
n				2		2	2	2		2	2	2
12007	Wine, Red	0	0	0	0	0	0	0.3	1	1	0	0
SD or min-max												
n				1		1	1	2		2		2
12008	Wine, White, Dry	0	0	0	0	0	0	0.1	0	0	0	2
SD or min-max												
n				1		1	1	2		1		2
12009	Wine, White, Sweet	0	0	0	0	0	0	0.1	0	0	0	1.5
SD or min-max												
n				1		1	1	2		1		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
13	**CONDIMENTS AND SPICES**									
13001	Anise seed	1.00	1610	384	9.5	14.9	15.9	38.1	14.6	7
SD or min-max					9.5-9.5		15.9-15.9			
n					2	1	2		1	1
13002	Baking powder, dry powder	1.00	760	179	4.9	0.1	0.2	43.9	0.8	50.2
SD or min-max					1.7	0.1	0.2		1.2	19.9
n					4	3	3		3.0	3
13003	Baking soda (bicarbonate), dry powder	0.90	0	0	0.3	0	0	0	0	36.9
SD or min-max					0.2-0.3					36.9-36.9
n					2	2	2	2	2	2
13004	Bay leaf, dried	1.00	1480	353	5.4	7.6	8.4	48.7	26.3	3.6
SD or min-max					5.4-5.4	7.6-7.6	8.4-8.4			
n					2	2	2		1	1
13005	Cardamom, seeds, ground	1.00	1350	322	8.3	8.5	6.7	42.4	28	5.5
SD or min-max						2				0.2
n					1	3	1		1	3
13006	Chilli, fresh, raw	0.90	188	45	85.7	1.2	0.4	6.9	4.8	1.2
SD or min-max							0.3-0.4			
n					1	1	2		1	1
13007	Chilli, dried	1.00	1280	309	12.6	13.9	[9.9]	25.5	31.2	7
SD or min-max					12.5-12.8	12.1-15.8	3			6.2-7.8
n					2	2	3		1	2
13008	Cinnamon, dried, ground	1.00	1010	244	13.1	2.8	2.6	26.3	52.3	2.9
SD or min-max					11.8-14.5	2.5-3.1				2.5-3.3
n					2	2	1		1	2
13009	Cloves, dry, raw	1.00	1040	251	27.6	6	10.4	16	34.5	5.4
SD or min-max					25.2-30.1	5.2-6.9				5.2-5.7
n					2	2	1		1	2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
13	**CONDIMENTS AND SPICES**								
13001	Anise seed	648	37	170	440	1440	16	5.3	5
SD or min-max		646-650	37-37	170-170	440-440	1440-1441	16-16	5.3-5.3	
n		2	2	2	2	2	2	2	1
13002	Baking powder, dry powder	4280	9.7	34	8410	10200	8850	0.89	0
SD or min-max		3117	8.2-11.3	29-39	1525	10100-10392	2610	1.32	0
n		3	2	2	3	2	3	4	3
13003	Baking soda (bicarbonate), dry powder	0	0.0	0	0	0	27400	0.00	0
SD or min-max		0-0	0-0	0-0	0-0	0-0	27360-27380	0-0	0-0
n		2	2	2	2	2	2	2	2
13004	Bay leaf, dried	832	43	120	112	530	23	3.7	3
SD or min-max		830-834	43-43	120-120	110-113	529-530	23-23	3.7-3.7	
n		2	2	2	2	2	2	2	1
13005	Cardamom, seeds, ground	383	14	215	165	1120	18	7.47	1
SD or min-max				200-229	152-178				
n		1	1	2	2	1	1	1	1
13006	Chilli, fresh, raw	15	1.2	30	51	320	3	0.27	1
SD or min-max									1-1
n		1	1	1	1	1	1	1	2
13007	Chilli, dried	142	6.2	175	274	2250	19	1.66	19
SD or min-max		125-159			263-284				
n		2	1	1	2	1	1	1	1
13008	Cinnamon, dried, ground	1183	8.3	54	21	482	17	2	3
SD or min-max									
n		1	1	1	1	1	1	1	1
13009	Cloves, dry, raw	536	14.2	253	86	877	183	1.13	8
SD or min-max		332-740	11.8-16.7	225-280	76-95	485			
n		2	2	2	2	3	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
13	**CONDIMENTS AND SPICES**											
13001	Anise seed	16	32	0		0.34	0.29	3.1	10	10	0	21
SD or min-max												
n		1	1	1		1	1	1		1		1
13002	Baking powder, dry powder	0	0	0	0	0	0	0	0	0	0	0
SD or min-max							0.01	0	0.1		0-0	
n				2		3	3	3		2		4
13003	Baking soda (bicarbonate), dry powder	0	0	0	0	0	0	0	0	0	0	0
SD or min-max							0-0	0-0	0-0		0-0	
n						2	2	2		2		2
13004	Bay leaf, dried	309	618	0	3710	0.01	0.42	2.0	180	180	0	46.5
SD or min-max							0.01-0.01	0.42-0.42	2-2			
n				1	1	2	2	2		1		1
13005	Cardamom, seeds, ground	0	0	0	0	0.21	0.18	1.1	[4]	[4]	0	21.0
SD or min-max							0.2-0.22	0.17-0.18		3-5		
n				1	0	2	2	1		2		1
13006	Chilli, fresh, raw	45	91	0	545	0.09	0.11	0.9	23	23	0	94.1
SD or min-max											23-23	
n						1	1	1		2		1
13007	Chilli, dried	195	390	0	2342	0.95	0.43	6.9	52	52	0	31.4
SD or min-max												
n					1	1	1	1		1		1
13008	Cinnamon, dried, ground	3	7	0	[39]	0.02	0.07	1.3	28	28	0	27.9
SD or min-max												
n				1		1	1	1		1		1
13009	Cloves, dry, raw	6	13	0	78	0.08	0.13	1.2	20	20.1	0	0
SD or min-max												
n						1	1	1		1		1

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
13	**CONDIMENTS AND SPICES**									
13010	Coconut, Milk	1.00	579	140	82.4	1	14.3	1.8	0.3	0.3
SD or min-max					80.8-83.9		12.8-15.8		0.2-0.3	
n					2	1	2		2	1
13011	Coriander Leaves, fresh, raw	0.83	241	57	81.9	3.3	0.7	7.7	3.5	2.9
SD or min-max					3.2					0.8
n					4	1	1		1	4
13012	Coriander seed, dried, ground	1.00	1430	347	10.7	13.4	18.8	10.1	41.7	5.3
SD or min-max					0.5	0.7				0.9
n					3	3	1		1	3
13013	Cumin seeds, dried, raw	1.00	1790	432	8.7	13.7	25.8	26.1	20.4	5.3
SD or min-max					3.2	11.8-15.6			10.5-30.4	4.9-5.8
n					4	2	1		2	2
13014	Curry leaves, fresh, raw	0.83	355	86	66.9	7.7	1.3	2.5	16.8	4.9
SD or min-max					65.3-68.4	7.4-7.9				
n					2	2	1		1	1
13015	Curry powder	1.00	1430	344	10.0	10.8	13.8	30.6	27.2	7.6
SD or min-max										3.4
n					1	1	1		1	3
13016	Fenugreek leaves, fresh, raw	0.44	158	38	87.3	4.4	0.2	2.2	4.9	1.0
SD or min-max					0.5					04-1.7
n					3	1	1		1	2
13017	Fenugreek seeds, raw	1.00	1290	309	9.8	21.4	6.4	23.4	36.1	3
SD or min-max					2.7	1.8			24.6-47.6	
n					4	3	1		2	1
13018	Garam masala	1.00	1530	368	10.1	15.6	15.1	31	[22.6]	5.6
SD or min-max					10.1-10.1	15.6-15.6				
n					2	2	1		1	1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
13	**CONDIMENTS AND SPICES**								
13010	Coconut, Milk	5	0.5	10	43	131	19	0.26	2
SD or min-max				9-10		116-146	18-20	0.25-0.27	2-2
n		1	1	2	1	2	2	2	2
13011	Coriander Leaves, fresh, raw	115	6.6	45	44	578	40	0.54	1
SD or min-max		84-146		18-73	26		22-58	0.4-0.68	0-1
n		2	1	2	4	1	2	2	2
13012	Coriander seed, dried, ground	613	20.1	245	347	1189	27	3.6	24.9
SD or min-max									
n		1	1	1	1	1	1	1	1
13013	Cumin seeds, dried, raw	854	38.4	330	308	1213	124	4.05	5
SD or min-max		830-878	31-45.8		176	692	44	3.8-4.29	4-5
n		2	2	1	4	3	3	2	2
13014	Curry leaves, fresh, raw	740	6.9	201	70	584	19	1.18	17
SD or min-max		659-820	5.1-8.7	182-220	57-83				
n		2	2	2	2	1	1	1	1
13015	Curry powder	479	34.3	333	301	1728	52	4.08	17
SD or min-max		478-480	8.2	136	83	322	52-52	4.05-4.1	17-17
n		2	3	3	3	3	2	2	2
13016	Fenugreek leaves, fresh, raw	185	7.8	61	48	96	66	0.54	4
SD or min-max		77	1.8	3	5	113	17		1-7
n		3	3	3	3	3	3	1	2
13017	Fenugreek seeds, raw	160	14.1	183	370	530	48	2.93	8
SD or min-max				14			23	0.75	2
n		1	1	3	1	1	4	3	3
13018	Garam masala	760	32.6	330	390	1450	97	3.80	17
SD or min-max		760-760	32.6-32.6	330-330	390-390	1450-1450	97-97	3.8-3.8	
n		2	2	2	2	2	2	2	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
13	**CONDIMENTS AND SPICES**											
13010	Coconut, Milk	0	0	0	0	0.02	0.01	0	14	14	0	0.9
SD or min-max				0-0				0-0		14-14		
n				2	0	1	1	2		2		1
13011	Coriander Leaves, fresh, raw	317	635	0	3810	0.3	0.1	0.9	62	62	0	35.9
SD or min-max								0.7-1.1				23.9-48
n						1	1	2		1		2
13012	Coriander seed, dried, ground	10	20	0	122	0.22	0.35	3.4	86	86	0	29
SD or min-max												
n						1	1	1		1		1
13013	Cumin seeds, dried, raw	44	88	0	527	0.55	0.19	3.2	90	90	0	15
SD or min-max							0.13-0.24	2.9-3.6				0-30
n				1		1	2	2		1		2
13014	Curry leaves, fresh, raw	645	1290	0	7740	0.08	0.17	1.6	94	94	0	7
SD or min-max						0.07-0.08	0.13-0.21	0.9-2.3				6-8
n				0		2	2	2		1		2
13015	Curry powder	80	161	0	965	0.25	0.28	3.5	56	56	0	11
SD or min-max						0.25-0.25	0.28-0.28	3.5-3.5				11-11
n				1		2	2	2		1		2
13016	Fenugreek leaves, fresh, raw	609	1220	0	7300	0.12	0.26	1.2	75	[75]	0	80.1
SD or min-max						0.01	0.03	0.4				18.9
n						3	3	3		1		3
13017	Fenugreek seeds, raw	8	15	0	91	0.34	0.29	1.5	57	57	0	3
SD or min-max							0.13	0.2		57-57		3-3
n						1	3	3		2		2
13018	Garam masala	28	57	0	340	0.35	0.33	2.5	0	0	0	0
SD or min-max						0.35-0.35	0.33-0.33	2.5-2.5		0-0		0-0
n				1		2	2	2		2		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
13	**CONDIMENTS AND SPICES**									
13019	Garlic, peeled or unpeeled, fresh, raw	0.85	638	152	62	6.3	2.8	22.7	5.2	1
SD or min-max										
n					1	1	1		1	1
13020	Ginger, dried, ground	0.85	1400	332	9.9	6.9	4.5	59.4	12.9	6.3
SD or min-max					4.42	6.3-7.6				5.7-6.9
n					3	2	1		1	2
13021	Green Ginger (Mature), fresh, raw	0.94	374	89	73.6	2.6	1.1	13.4	7.7	1.7
SD or min-max					66.2-80.9	2.3-2.8				
n					2	2	1		1	1
13022	Mint Leaves, fresh, raw	0.45	182	44	84.9	4.8	1.1	0.1	7.2	1.9
SD or min-max										
n					1	1	1		1	1
13023	Onion, mature, red skinned, peeled, fresh, raw	1.00	177	42	87.9	1.5	0.1	7.6	2.3	0.6
SD or min-max					5.7	0.3				0.1
n					4	4	1		1	4
13024	Onion, spring, raw	0.78	130	31	90.8	1.8	0.3	4.1	2.3	0.7
SD or min-max					1.2	0.2	0.2		1.9-2.6	0.5-0.8
n					3	3	3		2	2
13025	Parsley, fresh, raw	0.82	220	52	81.4	5.9	0.2	4.2	5.1	3.2
SD or min-max					74.6-88.2					
n					2	1	1		1	1
13026	Pepper, ground, black, dry, raw	1.00	1250	297	11.8	10.3	2.7	44.7	26.3	4.3
SD or min-max					1.90	1.19				4.2-4.4
n					3	3	1		1	2
13027	Salt, Iodized	1.00	0	0	0.2	0	0	0	0	99.8
SD or min-max					0.2-0.2					99.8-99.8
n					2	2	1		1	2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
13	**CONDIMENTS AND SPICES**								
13019	Garlic, peeled or unpeeled, fresh, raw	30	1.3	25	39	510	8	1	14
SD or min-max									
n		1	1	1	1	1	1	1	1
13020	Ginger, dried, ground	152	24.3	335	310	1225	50	3.72	55
SD or min-max		131-172		180-490	194-426		42-57		
n		2	1	2	2	1	2	1	1
13021	Green Ginger (Mature), fresh, raw	46.8	1.9	38	93.7	661	18	1	2
SD or min-max			1.1-2.6						
n		1	2	1	1	1	1	1	1
13022	Mint Leaves, fresh, raw	200	3.6	34	62	380	28	0.8	1
SD or min-max									
n		1	1	1	1	1	1	1	1
13023	Onion, mature, red skinned, peeled, fresh, raw	26	0.9	19	40	152	5	0.16	1
SD or min-max		7	0.8-1	7.09	12.4	37.2	2		
n		3	2	3	4	3	4	1	1
13024	Onion, spring, raw	44	1.3	14	34	225	12	0.3	1
SD or min-max		25	0.7	5	5	74	5	0.17	1-1
n		3	3	3	3	3	3	3	2
13025	Parsley, fresh, raw	390	5.06	35	175	1290	54	0.88	0
SD or min-max									
n		1	1	1	1	1	1	1	1
13026	Pepper, ground, black, dry, raw	463	19.4	253	188	576	25	1.28	3
SD or min-max		460-466	9.8	145-360	11	412-741			
n		2	3	2	3	2	1	1	1
13027	Salt, Iodized	32	0.1	1	6	98	38500	0.10	2
SD or min-max		29-34	0-0.2		3-8		38168-38850	0.1-0.1	
n		2	2	1	2	1	2	2	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
13	**CONDIMENTS AND SPICES**											
13019	Garlic, peeled or unpeeled, fresh, raw	0	0	0	0	0.23	0.4	0.8	3	3	0	11
SD or min-max												
n						1	1	1		1		1
13020	Ginger, dried, ground	80	161	0	965	0.16	0.27	3.5	88	88	0	29
SD or min-max												
n				1		1	1	1		1		1
13021	Green Ginger (Mature), fresh, raw	3	6	0	35	0.03	0.06	2.5	30	30	0	8
SD or min-max												
n						1	1	1		1		1
13022	Mint Leaves, fresh, raw	62	123	0	[740]	0.15	0.09	1.7	114	114	0	26
SD or min-max							0.05-0.13					
n						1	2	1		1		1
13023	Onion, mature, red skinned, peeled, fresh, raw	1	2	0	10	0.02	0.04	0.3	14	14	0	7
SD or min-max												
n					1	1	1	1		1		1
13024	Onion, spring, raw	53	105	0	632	0.04	0.06	0.6	48	48	0	26
SD or min-max						0.02	0.02	0.4		20		5.5
n						4	4	4		3		4
13025	Parsley, fresh, raw	354	708	0	4250	0.15	0.04	1.1	55	55	0	119
SD or min-max												
n				1		1	1	1		1		1
13026	Pepper, ground, black, dry, raw	14	29	0	171	0.09	0.14	0.7	10	10	0	0
SD or min-max												
n						1	1	1		1		1
13027	Salt, Iodized	0	0	0	0	0	0	0	0	0	0	0
SD or min-max						0-0	0-0	0-0		0-0		
n				1	0	2	2	2		2		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
13	**CONDIMENTS AND SPICES**									
13028	Spice, mixed or all spice	1.00	1490	360	8.5	9.4	16.3	26.3	35.8	3.8
SD or min-max					6.9-10.1	5.5-13.2	13.3-19.2			
n					2	2	2		1	1
13029	Tamarind, fruit, dry, raw		1260	298	21.3	5.0	[0.6]	65.4	5.3	2.4
SD or min-max										
n					1	1	1		0	1
13030	Tamarind, fruit, fresh, raw		1260	298	20.8	2.0	[0.2]	69.5	5.3	2.2
SD or min-max							0.2-0.2			1-3.4
n					1	1	2		1	2
13031	Tomato, sauce (Ketchup)	1.00	489	115	67.5	1.6	0.2	26.1	1.5	3.4
SD or min-max					65-69.9	1.2-2				
n					2	2	1		1	1
13032	Tomato, paste, with added salt	1.00	329	78	76.2	3.2	0.3	13.6	4.1	3
SD or min-max					75.9-76.5	3.1-3.2				2.4-3.5
n					2	2	1		1	2
13033	Tomato, soup, condensed, canned	1.00	227	54	84.0	1	0.3	10.8	1.9	2.3
SD or min-max										
n		1			1	1	1		1	1
13034	Turmeric, dried, ground	1.00	1260	300	13.7	6.3	[3.1]	51.7	20.0	5.2
SD or min-max					13.1-14.2	6.3-6.3	1.1-5.1			3.5-7
n					2	2	2		1	2
13035	Yeast, dry powder	1.00	1460	347	7.9	35.7	4.9	30.5	19.3	6.6
SD or min-max										4.8-8.4
n		1			1	1	1		1	2

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
13	**CONDIMENTS AND SPICES**								
13028	Spice, mixed or all spice	727	35.5	203	277	1440	90	3.65	3
SD or min-max		490-963	32.3-38.7	172-234	235-319	1000-1878		3.2-4.1	
n		2	2	2	2	2	1	2	1
13029	Tamarind, fruit, dry, raw	166	9	83	190	836	25	1	2
SD or min-max									
n		1	1	1	1	1	1	1	1
13030	Tamarind , fruit, fresh, raw	105	9.2	83	105	836	25	0.58	2
SD or min-max		60-149			97-113				
n		2	1	1	2	1	1	1	1
13031	Tomato, sauce (Ketchup)	13	0.7	16	28	316	918	0.18	0.5
SD or min-max									
n		1	1	1	1	1	1	1	1
13032	Tomato, paste, with added salt	30	1.7	43	71	911	630	0.57	4
SD or min-max		28-32	1.6-1.8	38-47	68-73	862-960		0.4-0.74	3-5
n		2	2	2	2	2	1	2	2
13033	Tomato, soup, condensed, canned	10	0.4	13	21	290	545	0.3	0.5
SD or min-max							450-640		
n		1	1	1	1	1	2	1	1
13034	Turmeric, dried, ground	500	39.0	225	284	1250	25	3.6	4.3
SD or min-max									
n		1	1	1	1	1	1	1	1
13035	Yeast, dry powder	120	3.4	230	1690	2000	50	8.0	1.0
SD or min-max		80-160			1290-2090				
n		2	1	1	2	1	1	1	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
13	**CONDIMENTS AND SPICES**											
13028	Spice, mixed or all spice	55	109	0	656	0.25	0.45	4.9	52	52	0	30
SD or min-max						0.21-0.3	0.21-0.69	2.8-6.9		33-70		
n				1		2	2	2		2		1
13029	Tamarind , fruit, dry, raw	0	0	0	1.54	60.00	0.18	2	10	[10]	0	[0.6]
SD or min-max												
n					1	1	1		1		1	
13030	Tamarind , fruit, fresh, raw	0	0	0	1.54	0.34	0.07	1.6	10	[10]	0	3.6
SD or min-max												
n					1	1	1	1		1		1
13031	Tomato, sauce (Ketchup)	22	43	0	[260]	0	0.1	1.3	16	16	0	0
SD or min-max												
n						1	1	1		1	1	1
13032	Tomato, paste, with added salt	113	225	0	1350	0.13	0.13	2.8	17	17	0	15
SD or min-max						0.12-0.14	0.08-0.17	2.8-2.8		12-21	0-0	14-15
n						2	2	2		2	2	2
13033	Tomato, soup, condensed, canned	11	22	0	130	0.3	0	1.3	3	3	0	4
SD or min-max												
n						1	1	1		1		1
13034	Turmeric, dried, ground	80	161	0	965	0.26	0.23	3.4	85	85	0.00	30.0
SD or min-max												
n						1	1	1		1		1
13035	Yeast, dry powder	0	0	0	0	2.8	4	8.5	4000	4000	0	0
SD or min-max						2.3-3.2						
n				1		2	1	1		1		2

Code	Food Name	Edible conversion factor	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
14	**INSECTS**									
14001	Grasshopper, Brown, Fresh, Raw	1.00	708	170	71.9	[12.8]	[12.8]	0.3	1.41	0.7
SD or min-max					0.6					
n					3	1	1			1
14002	Grasshopper, Green, Fresh, Raw	1.00	872	210	66.3	[14.5]	[16.3]	0.7	1.3	0.9
SD or min-max					0.1					
n					3	1	1			1
14003	Termite, Dry, Raw	1.00	2310	557	7.0	35	[43.6]	3.4	5.5	5.4
SD or min-max					4.4	10.1	10.1			2.4
n					5	4	3			3
14004	Termite, Fresh, Raw	1.00	1530	367	36.8	30.9	27	0	2.7	3.8
SD or min-max					25.7	8.7	22.5-31.5			
n					5	3	2			1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
14	**INSECTS**								
14001	Grasshopper, Brown, Fresh, Raw	7	3.7	10	35	75	66	3.57	-
SD or min-max									
n		1	1	1	1	1	1	1	
14002	Grasshopper, Green, Fresh, Raw	9	5.6	11	47	125	121	5.81	-
SD or min-max									
n		1	1	1	1	1	1	1	
14003	Termite, Dry, Raw	91	35.2	5	609	388	1969	0.09	4
SD or min-max						300-476			
n		1	1	1	1	2	1	1	1
14004	Termite, Fresh, Raw	1460	8.3	15	780	200	4	-	-
SD or min-max									
n		1	1	1	1	1	1		

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
14	**INSECTS**											
14001	Grasshopper, Brown, Fresh, Raw	174	174	174	tr	-	1.04	0.2	1	1	-	3.2
SD or min-max				81			0.55					
n				3			3	1		1		1
14002	Grasshopper, Green, Fresh, Raw	94	94	94	tr	-	0.93	3.6	1	1	-	[0.6]
SD or min-max				20			0.46					
n				3			3	1		1		1
14003	Termite, Dry, Raw	100	100	100	tr	0.08	3.56	3.9	0	0	-	[0.3]
SD or min-max							2.05					
n				2		2	4	2		1		
14004	Termite, Fresh, Raw	224	224	224	tr	-	4.18	2.8	0	0	-	[0.7]
SD or min-max												
n				2			2	1		1		

Code	Food Name	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
15	**MIXED DISHES**								
15001	Uji wa mahindi (Maize Porridge)	221	52	87.5	1.5	1.1	8.5	1.1	0.3
15002	Sorghum, Finger Millet and Maize Porridge	174	41	89.8	1.3	0.9	6.3	1.3	0.4
15003	Kaimati (Fried Dumplings)	1800	429	18.8	4.6	21.8	52.8	1.6	0.4
15004	Mahamri (Swahili Doughnuts)	1730	413	22.8	6	22.1	46.6	2.1	0.4
15005	Whole Maize Flour Ugali	596	141	64.5	3.3	1.8	26.0	3.8	0.5
15006	Maize and Finger Millet Flour Ugali	562	133	64.0	3.1	1.3	24.0	6.6	1.0
15007	Maize, Red Sorghum and Finger Millet Ugali	543	129	66.2	3.1	1.4	23.3	5.3	0.8
15008	Cassava and Red Sorghum Ugali	489	116	69.6	2.1	0.8	23.4	3.4	0.7
15009	Refined Maize Flour Ugali	626	148	62.8	3.4	1.9	27.3	4.0	0.6
15010	Sorghum, Maize flour & Finger Millet Ugali	634	150	61.0	1.9	0.7	32.1	3.6	0.7
15011	Cassava Flour Ugali	788	186	51.6	1.1	0.3	43.7	2.2	1.3
15012	Cassava, Millet & Sorghum Porridge	194	46	87.9	0.5	0.1	10.2	1.0	0.3
15013	Cassava Porridge (Uji wa Muhogo)	121	28	92.6	0.1	0.0	6.8	0.3	0.2
15014	Finger Millet Porridge (Uji wa Wimbi)	168	40	88.8	0.7	0.2	7.8	2.1	0.4
15015	Bulrush Millet Porridge (Uji wa Mawele)	350	83	79.2	2	1.0	15.7	1.6	0.6
15016	Rice Flour Porridge (Uji wa Mchele)	235	56	87.5	0.6	1.3	10.2	0.2	0.1
15017	Omena Stew (Silver Sardine Stew)	747	180	68.5	8.8	13.3	6.0	0.7	2.7
15018	"Busara" (Whole Maize and Finger Millet Porridge)	170	40	88.6	1	0.3	7.3	2.5	0.4
15019	White Chapati	1770	424	18.4	7.8	21.1	49.6	2.5	0.7
15020	Brown Chapati	1720	413	20.5	7.3	22.9	40.9	7.2	1.2
15022	Fried Egg (Mayai ya Kukaangwa)	926	223	64.2	13.1	17.9	2.5	0.0	2.4
15023	Omelette	502	121	77.6	6.6	7.8	5.3	1.5	1.2
15024	Spanish Omelette	667	161	74.0	7.5	12.9	3.2	0.8	1.6
15025	Meat Samosa (Sambusa ya Nyama)	1850	443	13.9	18.8	22.2	40.5	3.1	1.6
15026	Vegetable Samosa (Sambusa ya Mboga)	1360	325	30.2	8.5	13.1	40.2	6.2	1.7
15027	Pancakes (Chapati za Maji)	1140	270	41.5	8.3	8.5	39.2	1.7	0.8
15028	Tosti Mayai (Egg Toast)	1180	280	40.3	12.5	10.7	32.4	1.9	2.1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
15	**MIXED DISHES**								
15001	Uji wa mahindi (Maize Porridge)	25	0.3	12	64	50	10	0.33	2
15002	Sorghum, Finger Millet and Maize Porridge	33	0.5	14	47	57	10	0.27	2
15003	Kaimati (Fried Dumplings)	17	2.1	16	93	81	4	0.45	0
15004	Mahamri (Swahili Doughnuts)	20	2.8	19	113	101	4	0.56	0
15005	Whole Maize Flour Ugali	12	1.1	31	150	93	7	0.77	4
15006	Maize and Finger Millet Flour Ugali	79	2.9	48	112	158	6	0.73	5
15007	Maize, Red Sorghum and Finger Millet Ugali	39	1.9	44	118	131	6	0.72	5
15008	Cassava and Red Sorghum Ugali	24	0.9	38	74	163	9	0.50	5
15009	Refined Maize Flour Ugali	12	1.1	33	158	97	8	0.81	4
15010	Sorghum, Maize flour & Finger Millet Ugali	26	1.3	33	61	92	5	0.44	5
15011	Cassava Flour Ugali	79	0.8	26	57	326	20	0.41	1
15012	Cassava, Millet & Sorghum Porridge	18	0.4	10	15	47	6	0.12	1
15013	Cassava Porridge (Uji wa Muhogo)	12	0.1	4	7	39	5	0.05	0
15014	Finger Millet Porridge (Uji wa Wimbi)	35	1.1	16	17	52	4	0.16	2
15015	Bulrush Millet Porridge (Uji wa Mawele)	9	6.0	17	49	55	5	0.77	7
15016	Rice Flour Porridge (Uji wa Mchele)	4	0.1	5	17	26	5	0.11	1
15017	Omena Stew (Silver Sardine Stew)	378	1.0	20	333	188	449	2.26	4
15018	"Busara" (Whole Maize and Finger Millet Porridge)	60	1.9	20	32	41	4	0.22	2
15019	White Chapati	25	3.9	22	126	90	100	0.61	0
15020	Brown Chapati	23	2.4	76	182	213	120	1.50	25
15022	Fried Egg (Mayai ya Kukaangwa)	56	1.8	14	186	132	717	1.16	23
15023	Omelette	36	1.5	17	105	169	189	0.75	10
15024	Spanish Omelette	35	1.3	13	112	135	409	0.75	12
15025	Meat Samosa (Sambusa ya Nyama)	51	11.5	37	288	302	175	2.99	13
15026	Vegetable Samosa (Sambusa ya Mboga)	55	3.8	35	144	333	243	1.76	1
15027	Pancakes (Chapati za Maji)	77	2.9	22	163	138	37	0.83	4
15028	Tosti Mayai (Egg Toast)	56	2.1	25	167	152	587	1.20	20

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
15	**MIXED DISHES**											
15001	Uji wa mahindi (Maize Porridge)	7	7	7	3	0.02	0.05	0.2	7	7	0.09	0
15002	Sorghum, Finger Millet and Maize Porridge	7	7	7	3	0.02	0.05	0.3	5	5	0.09	0
15003	Kaimati (Fried Dumplings)	30	30	30	1	0.33	0.25	2.0	209*	76	0.25	0
15004	Mahamri (Swahili Doughnuts)	41	42	41	1	0.43	0.30	2.7	243*	60	0.34	0.1
15005	Whole Maize Flour Ugali	0	0	0	0	0.08	0.04	0.8	20	20	0	0
15006	Maize and Finger Millet Flour Ugali	0	0	0	0	0.07	0.02	1.2	24	24	0	0
15007	Maize, Red Sorghum and Finger Millet Ugali	0	0	0	0	0.07	0.03	1.0	20	20	0	0
15008	Cassava and Red Sorghum Ugali	0	0	0	3	0.05	0.04	0.7	14	14	0	0.5
15009	Refined Maize Flour Ugali	0	0	0	0	0.09	0.04	0.8	21	21	0	0
15010	Sorghum, Maize flour & Finger Millet Ugali	0	0	0	1	0.04	0.02	0.7	11	11	0	0
15011	Cassava Flour Ugali	1	1	0	7	0.03	0.05	0.6	18	18	0	1.8
15012	Cassava, Millet & Sorghum Porridge	0	0	0	1	0.01	0.01	0.2	4	4	0	0.1
15013	Cassava Porridge (Uji wa Muhogo)	0	0	0	1	0.00	0.01	0.1	2	2	0	0.2
15014	Finger Millet Porridge (Uji wa Wimbi)	0	0	0	0	0.01	0	0.4	6	6	0	0
15015	Bulrush Millet Porridge (Uji wa Mawele)	0	0	0	0	0.04	0.03	0.3	21	21	0	0.4
15016	Rice Flour Porridge (Uji wa Mchele)	0	0	0	0	0.01	0	0.2	1	1	0	0.1
15017	Omena Stew (Silver Sardine Stew)	52	60	44	94	0.04	0.18	1.6	12	12	5.61	6.4
15018	"Busara" (Whole Maize and Finger Millet Porridge)	0	0	0	0	0.02	0.01	0.5	8	8	0	0
15019	White Chapati	59	59	58	1	0.56	0.36	3.6	280	20	0.48	0
15020	Brown Chapati	1	1	1	1	0.29	0.08	2.0	36*	0	0	0
15022	Fried Egg (Mayai ya Kukaangwa)	192	192	192	0	0.11	0.50	0.0	60	60	1.66	0
15023	Omelette	95	109	81	165	0.08	0.25	0.4	38	38	0.70	13.4
15024	Spanish Omelette	110	119	102	102	0.08	0.28	0.2	40	40	0.88	20.3
15025	Meat Samosa (Sambusa ya Nyama)	66	85	48	223	0.47	0.42	5.1	222*	32	1.19	7.4
15026	Vegetable Samosa (Sambusa ya Mboga)	138	237	39	1185	0.46	0.31	3.2	227*	52	0.33	23.7
15027	Pancakes (Chapati za Maji)	77	78	76	8	0.40	0.40	2.5	203*	24	0.77	0
15028	Tosti Mayai (Egg Toast)	106	106	106	0	0.14	0.29	2.2	47	47	1	0

* (15003) includes 78 mcg of FOLAC; (15004) includes 108 mcg of FOLAC; (15020) includes 21 mcg of FOLAC; (15025) includes 112 mcg of FOLAC; (15026) includes 103 mcg of FOLAC; (15027) includes 105 mcg of FOLAC

Code	Food Name	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
15	**MIXED DISHES**								
15029	Drop Scones	1870	449	23.5	7.1	29.8	37.4	1.4	0.9
15030	“Terere” (Stir fried amaranth leaves)	342	83	80.6	3	5.3	2.9	5.5	2.7
15031	Sukumawiki (Stir fried kales)	225	54	87.0	2.5	3.2	2.1	3.8	1.5
15032	Stir-fried Cabbage	411	100	82.7	1.2	8.6	3.1	2.4	1.9
15033	Mrenda and Seveve (Jute Mallow and Pumpkin leaves)	249	59	85.3	3.4	2.3	5.4	2.0	1.6
15034	Pumpkin Leaves	410	99	80.8	3.2	6.7	5.5	1.5	2.3
15035	Saget, Terere & Managu (Spider plant, Amaranth & African Nightshade leaves)	251	60	83.0	4.3	1.9	4.5	3.8	2.5
15036	Pilau (Spiced Rice)	895	213	56.3	6.9	9.4	24.8	1.1	1.5
15037	Mseto wa Ndengu (Rice with green grams)	433	103	74.5	3.7	1.3	18.4	1.5	0.6
15038	Mseto wa Maharagwe (Add Rice with Beans)	807	193	58.2	5	7.9	23.5	3.8	1.7
15039	Nderema (Vine Spinach)	299	72	84.7	3.2	5.2	1.4	3.5	1.9
15040	Fiqe (Red Sorghum, Beans and Teff Flour)	807	192	52.5	7.2	5.8	24.2	7.4	2.9
15041	Qanchibelo (Beef, Maize & Wheat Flour)	560	133	68.6	9.6	3.1	15.7	1.7	1.3
15042	Qita (Maize and Wheat flour pancake)	1020	241	44.3	5.1	5.6	41.2	2.8	0.9
15043	Gurdo, Marqa (Ugali in Sour Milk)	1020	242	46.9	6.6	9.6	29.7	5.1	2.0
15044	Mchuzi wa ndengu (Green Gram Stew)	454	109	74.4	6.3	4.2	9.3	4.0	1.7
15045	Mchuzi wa Maharagwe (Bean Stew)	263	63	83.1	3.5	1.4	7.2	3.7	1.1
15046	Mchuzi wa Ndengu Kamande (Lentil Stew)	455	108	72.8	7.1	3.0	11.1	4.5	1.6
15047	Nyirinyiri (Camel meat)	2170	521	8.5	34.6	33.6	20	0	3.3
15048	Mbuboyi (Blood Cooked in Fresh Milk)	410	97	76.2	11.5	2	8.3	0	2.0
15049	Ashir	529	125	68.2	2.7	0.9	25.8	1.2	1.2
15051	Ugali (Cassava, Fingermillet and Sorghum Flour Ugali)	613	145	61.3	2	0.6	30.7	4.3	1.1
15052	Yam Stew	394	94	76.7	1.5	2.4	15.3	2.5	1.6
15053	Githeri (stewed Maize & Beans)	661	157	60.4	6.7	4.2	19.7	7.2	1.8
15054	Mukimo (Maize, Beans, Potatoes & Pumpkin Leaves)	498	118	67.1	5	0.7	20.5	4.8	1.9
15055	Githeri (Sauteed Fresh Maize and beans)	773	185	55.3	6.9	7.2	17.8	10.5	2.2
15056	Matoke (Stewed Green Bananas & Meat)	494	118	72.9	6	4.1	13.3	1.8	1.9

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
15	**MIXED DISHES**								
15029	Drop Scones	61	2.4	18	135	112	116	0.69	4
15030	“Terere” (Stir fried amaranth leaves)	192	4.9	87	72	442	161	0.75	14
15031	Sukumawiki (Stir fried kales)	291	2.3	33	56	198	123	0.42	0
15032	Stir-fried Cabbage	48	0.6	11	43	305	510	0.24	1
15033	Mrenda and Seveve (Jute Mallow and Pumpkin leaves)	141	1.8	26	105	197	180	0.62	2
15034	Pumpkin Leaves	166	2.0	51	101	236	332	0.67	2
15035	Saget, Terere & Managu (Spider plant, Amaranth & African Nightshade leaves)	184	3.3	39	104	244	174	0.70	8
15036	Pilau (Spiced Rice)	19	1.3	20	138	285	349	1.24	3
15037	Mseto wa Ndengu (Rice with green grams)	19	0.8	23	53	101	59	0.48	2
15038	Mseto wa Maharagwe (Add Rice with Beans)	27	1.3	24	129	172	356	0.76	1
15039	Nderema (Vine Spinach)	233	9.5	37	55	389	170	0.41	0
15040	Fiqe (Red Sorghum, Beans and Teff Flour)	170	3.5	77	214	315	495	1.40	4
15041	Qanchibelo (Beef, Maize & Wheat Flour)	62	5.9	24	156	169	225	1.97	8
15042	Qita (Maize and Wheat flour pancake)	24	2.8	28	131	105	158	1.81	0
15043	Gurdo, Marqa (Ugali in Sour Milk)	103	2.2	78	246	264	268	1.36	9
15044	Mchuzi wa ndengu (Green Gram Stew)	33	1.6	43	61	184	243	0.57	5
15045	Mchuzi wa Maharagwe (Bean Stew)	20	1.0	17	92	125	165	0.44	1
15046	Mchuzi wa Ndengu Kamande (Lentil Stew)	26	2.0	28	81	183	275	0.93	8
15047	Nyirinyiri (Camel meat)	7	6.9	21	213	407	346	3.62	17
15048	Mbuboyi (Blood Cooked in Fresh Milk)	57	13.9	8	62	199	361	1.08	17
15049	Ashir	18	0.2	9	29	39	128	0.21	1
15051	Ugali (Cassava, Fingermillet and Sorghum Flour Ugali)	69	1.7	40	70	236	11	0.53	4
15052	Yam Stew	13	0.7	14	46	279	347	0.21	0
15053	Githeri (stewed Maize & Beans)	39	2.2	41	214	281	233	1.01	2
15054	Mukimo (Maize, Beans, Potatoes & Pumpkin Leaves)	38	2.0	36	159	436	266	0.74	2
15055	Githeri (Sauteed Fresh Maize and beans)	41	2.2	43	222	308	335	1.32	3
15056	Matoke (Stewed Green Bananas & Meat)	16	3.9	22	105	380	381	1.12	5

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
15	**MIXED DISHES**											
15029	Drop Scones	88	89	86	21	0.33	0.33	2.0	166*	21	0.66	0
15030	"Terere" (Stir fried amaranth leaves)	209	418	0	2510	0.03	0.16	0.6	37	37	0	49.3
15031	Sukumawiki (Stir fried kales)	122	243	0	1460	0.08	0.10	0.8	35	35	0	82.1
15032	Stir-fried Cabbage	0	0	0	1	0.04	0.04	0.4	11	11	0	38.6
15033	Mrenda and Seveve (Jute Mallow and Pumpkin leaves)	72	121	24	580	0.03	0.22	0.3	21	21	0.31	9.19
15034	Pumpkin Leaves	61	107	16	548	0.03	0.16	0.6	17	17	0.24	10.7
15035	Saget, Terere & Managu (Spider plant, Amaranth & African Nightshade leaves)	132	244	19	1350	0.02	0.22	0.4	80	80	0.25	16.1
15036	Pilau (Spiced Rice)	5	8	2	39	0.04	0.10	1.5	12	12	0.40	5.9
15037	Mseto wa Ndengu (Rice with green grams)	1	1	0	9	0.04	0.04	0.3	30	30	0	0.3
15038	Mseto wa Maharagwe (Add Rice with Beans)	3	5	0	27	0.06	0.06	0.6	29	29	0	2.3
15039	Nderema (Vine Spinach)	166	313	20	1759	0.05	0.17	0.8	44	44	0	56.7
15040	Fiqe (Red Sorghum, Beans and Teff Flour)	82	131	34	584	0.15	0.12	1.4	62	62	0	24
15041	Qanchibelo (Beef, Maize & Wheat Flour)	40	63	18	270	0.14	0.18	2.4	85*	13	0.56	19.3
15042	Qita (Maize and Wheat flour pancake)	62	63	61	10	0.35	0.23	2.4	234*	28	0.15	0.2
15043	Gurdo, Marqa (Ugali in Sour Milk)	65	67	63	24	0.10	0.20	1.3	31	31	0.15	0.4
15044	Mchuzi wa ndengu (Green Gram Stew)	4	8	0	46	0.08	0.04	0.4	71	71	0	2.1
15045	Mchuzi wa Maharagwe (Bean Stew)	4	8	0	50	0.04	0.03	0.3	24	24	0	1.5
15046	Mchuzi wa Ndengu Kamande (Lentil Stew)	3	7	0	40	0.08	0.05	0.6	22	22	0	4.3
15047	Nyirinyiri (Camel meat)	1	3	0	15	0.04	0.31	8.3	12	12	2.31	0
15048	Mbuboyi (Blood Cooked in Fresh Milk)			65		0.05	0.17	0.2				
15049	Ashir	5	5	5	2	0.02	0.03	0.1	3	3	0.06	0.0
15051	Ugali (Cassava, Fingermillet and Sorghum Flour Ugali)	0	1	0	4	0.05	0.04	0.9	18	18	0	0.8
15052	Yam Stew	34	67	0	404	0.06	0.02	0.4	15	15	0	5.2
15053	Githeri (stewed Maize & Beans)	0	1	0	2	0.10	0.06	0.8	52	52	0	0.5
15054	Mukimo (Maize, Beans, Potatoes & Pumpkin Leaves)	4	9	0	52	0.08	0.05	0.9	48	48	0	2.7
15055	Githeri (Sauteed Fresh Maize and beans)	2	5	0	27	0.12	0.08	1.0	57	57	0	0.8
15056	Matoke (Stewed Green Bananas & Meat)	19	36	2	208	0.05	0.08	1.4	22	22	0.34	9.8

*(15029) includes 86 mcg of FOLAC; (15041) includes 43 mcg of FOLAC; (15042) includes 121 mcg of FOLAC

Code	Food Name	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
15	**MIXED DISHES**								
15057	Mukimo (Fresh Maize, Potatoes & Pumpkin Leaves)	457	109	68.8	3	1.0	18.5	6.8	1.9
15058	Stewed Potatoes & Arrowroots	380	90	78.0	1.9	2.1	15.0	1.8	1.2
15059	Mukimo wa Njahi (Black Beans, Green Bananas & Potatoes)	693	164	53.7	9.5	0.6	26.5	7.2	2.4
15060	Githeri (Fresh beans and Maize)	751	180	57.0	7.8	7.6	15.1	10.4	2.2
15061	Mashed Potato and Bananas	750	179	62.1	2.3	8.5	22.1	2.6	2.4
15062	Mukimo wa Njahi (Raw & Ripe Bananas)	636	151	57.7	6.4	0.6	26.6	6.5	2.2
15063	Groundnut Sauce	1240	298	50.2	10.6	23.4	9.6	3.5	2.7
15064	Vimumunya vya Chumvi (Pumpkin & Coconut Milk)	297	72	85.8	1.3	4.9	4.6	1.9	1.5
15065	Vinolo (Banana and Maize Flour Ugali)	524	124	68.4	2.2	0.9	25.5	2.5	0.6
15066	Biryani rice	641	152	65.3	2.7	3.2	27.9	0.3	0.6
15066	Biryani stew (Swahili Spiced Beef Stew)	822	198	65.3	8.1	14.3	8.3	1.9	2.1
15067	Vimumunya vya Sukari (Sweetened Pumpkin & Coconut Milk)	390	93	79.0	1.1	3.0	14.5	1.8	0.6
15068	Wukunu (Sweet potatoes & Dehulled Black Beans)	396	94	73.0	4.1	0.6	15.8	4.6	1.9
15069	Mushenye (Green Maize and Sweet Potatoes)	641	153	60.4	7.1	4.1	17.6	8.6	2.1
15070	Ingokho (Stewed Chicken)	883	211	59.7	18.3	12.3	6.4	1.1	2.3
15071	Malesele (Cow Blood with Sour Milk)	1400	335	37.5	20	21.2	15.4	1	4.9
15072	Tsiswa (Stewed termites)	2140	515	10.5	31.6	38.8	7.3	5.1	6.8
15073	Ingokho (Fried Chicken)	2220	532	6.8	44.6	35.3	9.1	0	4.3
15074	Wali wa Kuchemshwa (Boiled Rice)	584	138	67.1	2.7	2	27.2	0.2	0.7
15075	Wali wa Yasmin (Onion Fried Rice)	779	185	58.9	3.2	5.1	31.2	0.6	1.0
15076	Stir-fried Spinach	307	74	84.4	2.8	5.4	2.0	3.3	2.1
15077	Thabai / Thaa (Stinging Nettle Leaves)	143	34	92.3	1.2	2.4	1.9	0.6	1.8
15078	Rhikhuvi (Stewed Cowpea Leaves)	630	152	74.1	3.2	13.3	3.5	3.2	2.8
15079	Kunde and Mrenda (Stewed Cowpeas and Jute Mallow leaves)	238	57	83.5	3.7	2.0	4.4	3.3	3.1
15080	Obwoba (Stewed Mushrooms in Peanut Butter)	487	117	73.3	4.9	6.3	8.3	3.8	3.4
15081	Chai ya Maziwa (Mixed Tea)	153	36	92.1	1.1	1.2	5.4	0.0	0.3

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
15	**MIXED RECIPES**								
15057	Mukimo (Fresh Maize, Potatoes & Pumpkin Leaves)	44	1.6	35	116	404	336	0.93	2
15058	Stewed Potatoes & Arrowroots	8	0.9	17	38	401	173	0.44	1
15059	Mukimo wa Njahi (Black Beans, Green Bananas & Potatoes)	31	3.2	65	152	606	273	1.06	4
15060	Githeri (Fresh beans and Maize)	17	1.7	24	119	319	433	1.21	3
15061	Mashed Potato and Bananas	12	1.4	23	70	551	544	0.36	1
15062	Mukimo wa Njahi (Raw & Ripe Bananas)	24	2.2	54	103	437	229	0.79	3
15063	Groundnut Sauce	132	2.3	101	209	366	492	1.20	7
15064	Vimumunya vya Chumvi (Pumpkin & Coconut Milk)	16	0.3	13	39	183	325	0.25	1
15065	Vinolo (Banana and Maize Flour Ugali)	9	1.2	22	68	147	9	1.16	0
15066	Biryani rice	9	0.3	9	52	22	180	0.47	0
15066	Biryani stew (Swahili Spiced Beef Stew)	28	5.2	24	139	332	480	1.58	8
15067	Vimumunya vya Sukari (Sweetened Pumpkin & Coconut Milk)	14	0.3	11	31	155	15	0.21	1
15068	Wukunu (Sweet potatoes & Dehulled Black Beans)	21	1.5	33	82	288	229	0.41	1
15069	Mushenye (Green Maize and Sweet Potatoes)	44	2.3	51	196	340	242	1.07	3
15070	Ingokho (Stewed Chicken)	21	2.7	23	211	210	482	1.01	16
15071	Malesele (Cow Blood with Sour Milk)	85	24.8	19	123	831	1070	1.85	29
15072	Tsiswa (Stewed termites)	137	29.8	13	584	412	2280	0.41	5
15073	Ingokho (Fried Chicken)	31	5.6	38	492	410	932	2.13	39
15074	Wali wa Kuchemshwa (Boiled Rice)	9	0.3	9	50	21	216	0.46	0
15075	Wali wa Yasmin (Onion Fried Rice)	13	0.5	12	61	46	275	0.53	1
15076	Stir-fried Spinach	99	3.7	66	47	299	870	0.62	1
15077	Thabai / Thaa (Stinging Nettle Leaves)	132	1.4	28	26	113	312	0.14	1
15078	Rhikhuvi (Stewed Cowpea Leaves)	146	1.3	23	49	202	660	0.53	1
15079	Kunde and Mrenda (Stewed Cowpeas and Jute Mallow leaves)	158	2.4	23	93	244	761	0.64	2
15080	Obwoba (Stewed Mushrooms in Peanut Butter)	38	1.4	47	130	408	822	0.54	15
15081	Chai ya Maziwa (Mixed Tea)	42	0.0	5	40	45	15	0.21	1

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
15	**MIXED DISHES**											
15057	Mukimo (Fresh Maize, Potatoes & Pumpkin Leaves)	14	27	0	163	0.09	0.06	1.2	36	36	0	3.7
15058	Stewed Potatoes & Arrowroots	3	7	0	40	0.08	0.05	1.0	12	12	0	7.1
15059	Mukimo wa Njahi (Black Beans, Green Bananas & Potatoes)	0	0	0	2	0.2	0.08	1.2	19	19	0	4.2
15060	Githeri (Fresh beans and Maize)	6	13	0	76	0.13	0.09	1.4	54	54	0	9.2
15061	Mashed Potato and Bananas	4	8	0	49	0.06	0.04	0.9	35	35	0	12.6
15062	Mukimo wa Njahi (Raw & Ripe Bananas)	1	2	0	12	0.15	0.07	0.8	14	14	0.	9.8
15063	Groundnut Sauce	28	28	28	2	0.28	0.21	5	27	27	0.17	0
15064	Vimumunya vya Chumvi (Pumpkin & Coconut Milk)	88	176	0	1060	0.05	0.05	0.6	22	22	0	5.5
15065	Vinolo (Banana and Maize Flour Ugali)	16	16	16	1	0.12	0.08	0.9	96*	8	0	6.2
15066	Biryani rice	0	0	0	0	0.02	0.04	0.4	3	3	0	0
15066	Biryani stew (Swahili Spiced Beef Stew)	24	43	6	225	0.04	0.13	1.8	14	14	0.47	14.5
15067	Vimumunya vya Sukari (Sweetened Pumpkin & Coconut Milk)	81	162	0	973	0.05	0.04	0.5	19	19	0	5
15068	Wukunu (Sweet potatoes & Dehulled Black Beans)	1	1	0	8	0.10	0.04	0.7	9	9	0	12.6
15069	Mushenye (Green Maize and Sweet Potatoes)	1	3	0	16	0.15	0.07	1.6	50	50	0	5.9
15070	Ingokho (Stewed Chicken)	63	74	53	125	0.11	0.13	5.1	14	14	0.38	18.4
15071	Malesele (Cow Blood with Sour Milk)	-	-	106	-	0.1	0.25	0.7	-	-	-	-
15072	Tsiswa (Stewed termites)	95	96	94	10	0.05	3.15	2.9	4	4	0.25	1.3
15073	Ingokho (Fried Chicken)	134	134	134	0	0.18	0.25	12.3	13	13	0.97	2.3
15074	Wali wa Kuchemshwa (Boiled Rice)	0	0	0	0	0.02	0.04	0.4	3	3	0	0
15075	Wali wa Yasmin (Onion Fried Rice)	0	0	0	1	0.02	0.05	0.5	4	4	0	0.9
15076	Stir-fried Spinach	142	284	0	1700	0.02	0.08	0.5	70	70	0	16.9
15077	Thabai / Thaa (Stinging Nettle Leaves)	0	1	0	4	0.01	0.06	0.2	62	62	0	1
15078	Rhikhuvi (Stewed Cowpea Leaves)	32	52	12	239	0.19	0.22	0.7	31	31	0.15	12.6
15079	Kunde and Mrenda (Stewed Cowpeas and Jute Mallow leaves)	84	147	21	757	0.1	0.29	0.4	38	38	0.28	13.1
15080	Obwoba (Stewed Mushrooms in Peanut Butter)	6	12	0	69	0.17	0.35	2.2	27	27	0	6.7
15081	Chai ya Maziwa (Mixed Tea)	14	14	13	6	0	0	0.0	1	1	0.17	0

*(15065) includes 52 mcg of FOLAC

Code	Food Name	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
15	**MIXED DISHES**								
15082	Stewed Dried Fish	1380	330	42.7	25.7	23.2	3.9	1.4	3.0
15083	Kimanga cha Ndizi (Smoked Green Bananas and Kidney Beans)	614	146	57.7	6.5	0.9	24.1	7.7	3.1
15084	Kimanga Cha Mihogo (Mashed Cassava and Pigeon Peas)	823	194	46.8	4.8	0.6	39.6	5.8	2.4
15085	Ndoto (Sauteed Red Kidney Beans & Red Sorghum)	806	193	56.4	5.7	7.9	21.3	7.0	1.9
15086	Muthokoi (Dehulled Maize and Beans)	677	161	62.7	5	5.9	19.8	4.6	2.0
15087	Beef Stew	756	181	65.7	17.7	10.4	3.8	0.8	1.7
15088	Munono (Cow blood, beef, cow fat)	2270	549	23.9	19.5	50.3	4.6	0	1.8
15089	Osarge Ogkole (Fresh blood and Fresh milk)	340	81	82.5	6.1	3.1	7.0	0	1.2
15090	Kimanga cha Viazi Vitamu (Mashed Sweet Potato & Black Beans)	472	112	68.0	5.4	0.5	18.9	5.2	2.1
15091	Kitojo (Sweet Potato Leaves)	596	144	74.6	3.9	12.7	1.4	4.6	2.9
15092	Mchuzi wa Mbaazi (Pigeon Peas Stew)	494	118	70.9	5.7	4.4	11.0	6.1	1.9
15093	Nchenga/ Nzenga (Crushed Maize)	542	129	69.5	2.2	3.9	20.3	1.8	2.2
15094	Mseto wa Viazi (Potatoes in Rice)	469	111	73.7	2.2	1.9	21.1	0.5	0.6
15095	Likhanga (Stewed Guinea Fowl)	642	154	69.7	15.8	9.0	2.0	0.7	2.7
15096	Fried tilapia	1821	437	23.5	45.7	28.1	0.3	0.0	2.5
15097	Stewed Green Bananas	350	84	81.8	1	3.8	10.4	2.2	0.8
15098	Stir Fried Beef	1070	255	50.3	26.7	14.1	5.0	1.0	3.1
15099	Stir Fried Goat Meat	1600	383	30.2	32.1	23.3	10.4	1.7	2.3
15100	Finger Millet Ugali	505	120	65.1	2.9	0.7	21.0	8.9	1.4
15101	Omena wa Kukaangwa (Fried Omena)	1860	450	32.8	19.2	39.3	4.6	0.8	3.4
15102	Aluru (Stewed Quails)	809	195	65.9	11.3	14.2	5.2	0.6	2.9
15103	Mashed Potatoes	449	106	71.0	2.5	0.2	22.8	1.7	1.8
15104	Mashed Bananas	344	81	76.9	1.2	0.3	16.9	3.0	1.7
15105	Enriched Mashed Potatoes	591	141	70.4	2	6.2	18.6	1.4	1.4
15106	Enriched Mashed Bananas	568	136	72.9	1	7.8	14.3	2.6	1.5
15107	Stewed Nile Perch	522	125	74.0	14.3	6.3	2.5	0.5	2.4
15108	Stewed Goat Meat	925	222	59.4	17.1	14.6	5.2	0.8	2.9

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
15	**MIXED DISHES**								
15082	Stewed Dried Fish	189	2.1	57	395	403	572	1.02	29
15083	Kimanga cha Ndizi (Smoked Green Bananas and Kidney Beans)	46	2.0	43	188	401	485	0.89	2
15084	Kimanga Cha Mihogo (Mashed Cassava and Pigeon Peas)	94	1.6	44	93	469	303	0.85	4
15085	Ndoto (Sauteed Red Kidney Beans & Red Sorghum)	25	1.8	53	162	211	270	0.89	6
15086	Muthokoi (Dehulled Maize and Beans)	27	1.3	25	120	185	325	0.59	1
15087	Beef Stew	12	11.2	27	257	264	315	3.48	18
15088	Munono (Cow blood, beef, cow fat)	10	16.6	19	203	245	286	3.19	23
15089	Osarge Ogkole (Fresh blood and Fresh milk)	101	4.7	11	105	161	148	0.79	8
15090	Kimanga cha Viazi Vitamu (Mashed Sweet Potato & Black Beans)	32	1.6	38	78	388	276	0.63	2
15091	Kitojo (Sweet Potato Leaves)	97	0.9	51	31	500	648	0.26	1
15092	Mchuzi wa Mbaazi (Pigeon Peas Stew)	47	1.4	33	69	260	281	0.74	4
15093	Nchenga/ Nzenga (Crushed Maize)	13	0.3	11	22	85	552	0.16	0
15094	Mseto wa Viazi (Potatoes in Rice)	9	0.4	9	45	92	131	0.38	0
15095	Likhanga (Stewed Guinea Fowl)	31	2.0	22	152	240	736	1.25	18
15096	Fried tilapia	252	6.2	40	387	349	149	1.16	39
15097	Stewed Green Bananas	9	0.7	15	24	175	100	0.21	1
15098	Stir Fried Beef	16	16.4	40	422	483	682	5.13	27
15099	Stir Fried Goat Meat	33	4.1	50	424	465	221	5.74	43
15100	Finger Millet Ugali	137	4.4	61	72	212	3	0.67	6
15101	Omena wa Kukaangwa (Fried Omena)	879	2.3	33	782	281	90	5.28	7
15102	Aluru (Stewed Quails)	90	1.6	23	202	302	761	1.24	9
15103	Mashed Potatoes	10	1.4	20	82	650	330	0.32	1
15104	Mashed Bananas	8	0.6	20	25	245	348	0.19	1
15105	Enriched Mashed Potatoes	10	1.1	16	67	529	209	0.26	1
15106	Enriched Mashed Bananas	8	0.5	17	22	207	276	0.16	1
15107	Stewed Nile Perch	105	1.0	26	216	203	596	0.51	16
15108	Stewed Goat Meat	16	2.1	25	225	235	783	3.04	23

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
15	**MIXED DISHES**											
15082	Stewed Dried Fish	0	0	57	124	0.05	0.03	3.3	0	19	1.52	10.4
15083	Kimanga cha Ndizi (Smoked Green Bananas and Kidney Beans)	2	3	0	20	0.10	0.09	0.9	48	48	0	0.8
15084	Kimanga Cha Mihogo (Mashed Cassava and Pigeon Peas)	4	8	0	49	0.13	0.07	0.8	52	52	0	1.5
15085	Ndoto (Sauteed Red Kidney Beans & Red Sorghum)	0	1	0	3	0.08	0.05	1.0	35	35	0	0.4
15086	Muthokoi (Dehulled Maize and Beans)	0	0	0	2	0.07	0.04	0.4	31	31	0	0.4
15087	Beef Stew	14	21	7	89	0.01	0.20	3.3	7	7	1.16	7.7
15088	Munono (Cow blood, beef, cow fat)	-	-	34	-	0.03	0.18	2.6	-	-	-	-
15089	Osarge Ogkole (Fresh blood and Fresh milk)	-	-	49	-	0.02	0.23	0.1	-	-	-	-
15090	Kimanga cha Viazi Vitamu (Mashed Sweet Potato & Black Beans)	4	8	0	49	0.12	0.05	0.8	9	9	0	7.8
15091	Kitojo (Sweet Potato Leaves)	138	276	0	1653	0.07	0.26	0.9	2	2	0	8.1
15092	Mchuzi wa Mbaazi (Pigeon Peas Stew)	8	16	0	93	0.13	0.03	0.5	47	47	0	2.9
15093	Nchenga/ Nzenga (Crushed Maize)	87	173	0	1038	0.03	0.01	0.2	5	5	0	1.5
15094	Mseto wa Viazi (Potatoes in Rice)	2	4	0	23	0.02	0.03	0.4	7	7	0	2.5
15095	Likhanga (Stewed Guinea Fowl)	10	18	2	96	0.02	0.15	2.4	7	7	0.14	8.4
15096	Fried tilapia	24	24	24	0	0.09	0.35	7.5	12	12	3.50	0
15097	Stewed Green Bananas	6	13	0	75	0.03	0.03	0.3	10	10	0	13.2
15098	Stir Fried Beef	19	28	10	107	0.02	0.31	5.1	10	10	1.86	9.4
15099	Stir Fried Goat Meat	42	60	24	214	0.20	0.33	5.4	14	14	2.84	18.7
15100	Finger Millet Ugali	0	0	0	1	0.06	0.01	1.6	26	26	0	0
15101	Omena wa Kukaangwa (Fried Omena)	55	69	41	171	0.11	0.17	5.4	22	22	16.78	10.9
15102	Aluru (Stewed Quails)	51	58	44	80	0.06	0.36	2.7	9	9	0.61	7.9
15103	Mashed Potatoes	0	0	0	0	0.06	0.03	1.1	42	42	0	6.0
15104	Mashed Bananas	0	0	0	2	0.04	0.03	0.2	11	11	0	13.7
15105	Enriched Mashed Potatoes	51	54	48	38	0.05	0.03	0.9	34	34	0	4.9
15106	Enriched Mashed Bananas	63	67	59	48	0.03	0.03	0.2	9	9	0.01	11.6
15107	Stewed Nile Perch	16	22	10	68	0.01	0.01	1.6	9	9	0.86	5.2
15108	Stewed Goat Meat	21	29	13	94	0.11	0.17	2.9	8	8	1.52	8.2

Code	Food Name	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
15	**MIXED DISHES**								
15109	Pan Fried Sweet Potatoes	1040	248	51.7	3.1	13.9	25.3	4.9	1.2
15110	Potato Chips	1370	326	32.1	4.8	13.6	44.4	3.3	1.9
15111	Kimito (Mashed Beans & Potatoes)	537	127	64.1	5.7	0.8	21.6	5.4	2.3
15112	Arrowroot Stew	383	91	77.8	1.9	2.3	14.9	1.8	1.4
15113	Sweet Potatoes with Peanut Butter	373	89	81.1	2.2	4.4	9.3	2.2	0.9
15114	Black Bean Stew (Dolichos/ Njahi Stew)	261	62	83.6	3.6	1.3	7.7	2.8	1.1
15115	Bean Stew with Milk and Cream	584	139	65.2	7.2	4.5	14.3	6.7	2.2
15116	Mcheleng (Rice with Milk)	741	176	61.5	3.9	5.7	27.2	0.2	1.4
15117	Pan Fried Arrowroots	761	181	56.9	4.1	5.2	28.3	2.5	3.1
15118	Nyenyi (Mashed Pigeon Peas & Green Maize)	524	125	66.4	4.9	2.3	17.8	6.5	2.0
15119	Finger Millet and Sorghum Porridge	311	74	82.3	2.7	2.2	9.7	2.3	0.8
15120	Mashed Pumpkin and Black Nightshade Leaves	277	67	80.8	3.8	2.4	4.9	5.1	3.0
15121	Enriched Matoke	465	111	73.7	2.4	3.5	15.8	3.2	1.4
15122	Oatmeal	351	83	78.3	2.4	1.7	12.9	3.5	1.2
15123	Oat Porridge (Uji wa Shayiri)	363	86	79.3	1.9	1.6	15.3	1.4	0.5
15124	Enriched Mandazi (East African Doughnuts; Enriched)	1590	379	23.5	7.6	16.1	49.9	2.2	0.8
15125	Basic Mandazi (East African Doughnuts; Basic)	1430	340	28.2	6.4	12.9	48.7	2.1	1.7
15126	Stewed Split Dal	291	69	81.8	3.7	1.9	8.1	2.7	1.9
15127	Potato Curry	608	145	69.0	2.2	7.0	17.3	2.2	2.3
15128	Peas and Brinjal Curry	544	131	72.5	4.2	8.5	6.6	5.8	2.4
15129	Steamed Rice (Wali wa Mvuke)	513	121	68.6	2.6	0.3	26.7	0.2	1.5
15130	Rotli (Indian Chapati)	1560	374	21.6	8	16.7	43.8	7.9	2.0
15131	Potato Bhajia	1960	471	15.1	8.6	31.0	37.1	4.8	3.5
15132	Chaas (Diluted Yoghurt)	252	60	86.6	2	2.2	8.0	0.0	1.1
15133	Siro (Semolina & Nuts)	1720	412	28.4	4.3	26.1	39.4	1.1	0.8
15134	Minced Meat Balls	659	157	65.9	8.1	5.4	18.6	0.8	1.3
15136	Wheat Flour Porridge (Uji wa Ngano)	468	111	76.3	2.5	3.9	16.1	0.9	0.3
15137	Okra Meat Dish	394	94	80.1	8.2	5.1	3.2	1.3	2.1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
15	**MIXED DISHES**								
15109	Pan Fried Sweet Potatoes	44	0.8	21	50	325	16	0.73	1
15110	Potato Chips	17	2.7	37	159	1260	13	0.63	1
15111	Kimito (Mashed Beans & Potatoes)	35	2.2	36	173	557	359	0.77	2
15112	Arrowroot Stew	11	0.9	18	41	431	250	0.44	1
15113	Sweet Potatoes with Peanut Butter	23	0.7	21	33	179	130	0.42	1
15114	Black Bean Stew (Dolichos/ Njahi Stew)	17	1.2	26	55	175	164	0.42	2
15115	Bean Stew with Milk and Cream	66	1.9	34	197	259	273	0.96	2
15116	Mcheleng (Rice with Milk)	53	0.4	12	96	73	419	0.64	1
15117	Pan Fried Arrowroots	8	1.3	29	50	696	616	1.09	1
15118	Nyenyi (Mashed Pigeon Peas & Green Maize)	56	1.8	41	106	479	273	0.89	4
15119	Finger Millet and Sorghum Porridge	93	1.1	24	91	130	23	0.54	4
15120	Mashed Pumpkin and Black Nightshade Leaves	91	6.7	41	75	456	411	0.66	1
15121	Enriched Matoke	15	0.9	33	37	256	220	0.32	2
15122	Oatmeal	15	1.0	35	110	82	209	0.71	10
15123	Oat Porridge (Uji wa Shayiri)	39	0.4	18	77	69	14	0.45	5
15124	Enriched Mandazi (East African Doughnuts; Enriched)	45	3.3	21	134	105	80	0.66	2
15125	Basic Mandazi (East African Doughnuts; Basic)	136	3.5	19	331	350	241	0.52	0
15126	Stewed Split Dal	22	1.2	21	54	142	459	0.42	6
15127	Potato Curry	25	1.7	22	68	475	537	0.41	1
15128	Peas and Brinjal Curry	38	2.1	30	71	253	520	1.96	2
15129	Steamed Rice (Wali wa Mvuke)	10	0.3	9	49	22	521	0.45	1
15130	Rotli (Indian Chapati)	25	2.7	83	199	234	354	1.64	27
15131	Potato Bhajia	29	3.0	39	132	783	587	0.78	2
15132	Chaas (Diluted Yoghurt)	106	0.1	8	66	93	262	0.24	2
15133	Siro (Semolina & Nuts)	81	0.5	19	105	140	24	0.66	4
15134	Minced Meat Balls	14	4.4	17	126	133	321	1.55	7
15136	Wheat Flour Porridge (Uji wa Ngano)	14	0.9	21	32	60	3	0.24	1
15137	Okra Meat Dish	23	5.2	24	126	199	559	1.65	8

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β–carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
15	**MIXED DISHES**											
15109	Pan Fried Sweet Potatoes	796	1590	0	9550	0.04	0.07	1.2	11	11	0	35.2
15110	Potato Chips	0	0	0	0	0.11	0.07	2.3	82	82	0	12.0
15111	Kimito (Mashed Beans & Potatoes)	0	0	0	1	0.09	0.06	1.0	58	58	0	3.4
15112	Arrowroot Stew	48	95	0	570	0.09	0.05	1.1	13	13	0	5.3
15113	Sweet Potatoes with Peanut Butter	263	526	0	3160	0.05	0.04	1.1	10	10	0	17.0
15114	Black Bean Stew (Dolichos/ Njahi Stew)	3	5	0	30	0.07	0.03	0.4	4	4	0	2.6
15115	Bean Stew with Milk and Cream	25	32	19	77	0.08	0.11	0.6	47	47	0.12	4.4
15116	Mcheleng (Rice with Milk)	44	47	42	27	0.02	0.14	0.3	9	9	0.20	0.0
15117	Pan Fried Arrowroots	2	3	0	20	0.21	0.10	2.4	0	0	0	1.7
15118	Nyenyi (Mashed Pigeon Peas & Green Maize)	23	34	12	130	0.14	0.05	1.0	54	54	0	2.9
15119	Finger Millet and Sorghum Porridge	22	23	22	10	0.02	0.14	0.4	9	9	0.28	0
15120	Mashed Pumpkin and Black Nightshade Leaves	88	176	0	1050	0.09	0.27	1.4	233	233	0	21.5
15121	Enriched Matoke	0	0	0	2	0.08	0.04	1.0	14	14	0	12.0
15122	Oatmeal	0	0	0	0	0.13	0.03	0.2	6	6	0	0
15123	Oat Porridge (Uji wa Shayiri)	11	11	11	5	0.05	0.08	0.1	3	3	0.14	0
15124	Enriched Mandazi (East African Doughnuts; Enriched)	90	92	88	24	0.47	0.36	3.0	236*	21	0.57	0.7
15125	Basic Mandazi (East African Doughnuts; Basic)	48	48	48	1	0.46	0.29	3.0	230*	17	0.40	0
15126	Stewed Split Dal	9	18	0	105	0.05	0.03	0.3	31	31	0.00	4.8
15127	Potato Curry	10	20	0	120	0.06	0.04	0.9	32	32	0.00	11.4
15128	Peas and Brinjal Curry	29	58	0	348	0.13	0.09	1.1	56	56	0.00	16.8
15129	Steamed Rice (Wali wa Mvuke)	0	0	0	0	0.02	0.04	0.4	2	2	0.00	0.0
15130	Rotli (Indian Chapati)	44	46	42	25	0.32	0.09	2.2	39*	0	0.00	0.0
15131	Potato Bhajia	5	9	1	50	0.17	0.09	1.8	81	81	0.00	8.2
15132	Chaas (Diluted Yoghurt)	24	26	23	16	0.04	0.11	0.0	0	0	0.12	0.0
15133	Siro (Semolina & Nuts)	196	205	187	105	0.03	0.18	0.3	9	9	0.32	0.0
15134	Minced Meat Balls	9	16	2	79	0.02	0.10	1.4	5	5	0.43	4.1
15136	Wheat Flour Porridge (Uji wa Ngano)	7	7	7	0	0.11	0.05	1.4	37*	7	0.06	0.0
15137	Okra Meat Dish	15	28	3	151	0.03	0.10	1.7	13	13	0.51	9.3

* (15124) includes 127 mcg of FOLAC; (15125) includes 125 mcg of FOLAC; (15130) includes 23 mcg of FOLAC; (15136) includes 17 mcg of FOLAC

Code	Food Name	Energy (kJ)	Energy (kcal)	Water (g)	Protein (g)	Fat (g)	Carbohydrate available (g)	Fibre (g)	Ash (g)
15	**MIXED DISHES**								
15138	Hydrabadi Biryani	819	195	59.3	8.2	8.3	21.4	0.9	1.9
15139	Chick Peas Curry	524	126	69.2	6	5.1	10.3	7.3	2.1
15140	Bhature (Fried Indian Bread)	1410	337	36.1	5.9	18.5	35.9	1.7	1.9
15141	Pumpkins with Peanut Butter	359	86	82.7	2.6	5.5	5.4	2.6	1.3
15142	Firinda (Skinned bean Stew)	390	93	74.9	5.2	2.3	10.2	5.3	2.1

Code	Food name	Ca (mg)	Fe (mg)	Mg (mg)	P (mg)	K (mg)	Na (mg)	Zn (mg)	Se (mcg)
15	**MIXED DISHES**								
15138	Hydrabadi Biryani	35	1.0	22	115	187	457	0.62	15
15139	Chick Peas Curry	77	2.5	48	83	329	426	0.96	11
15140	Bhature (Fried Indian Bread)	62	2.8	18	108	109	518	0.50	1
15141	Pumpkins with Peanut Butter	24	0.6	29	44	195	196	0.36	1
15142	Firinda (Skinned bean Stew)	43	1.6	32	150	229	355	0.70	2

Code	Food name	Vit A RAE (mcg)	Vit A RE (mcg)	Retinol (mcg)	β-carotene equivalent (mcg)	Thiamin (mg)	Riboflavin (mg)	Niacin (mg)	Dietary Folate Eq. (mcg)	Food folate (mcg)	Vit B12 (mcg)	Vit C (mg)
15	**MIXED DISHES**											
15138	Hydrabadi Biryani	13	19	8	65	0.06	0.09	1.2	4	4	1.08	1.9
15139	Chick Peas Curry	12	23	0	140	0.11	0.06	0.6	61	61	0.00	5.5
15140	Bhature (Fried Indian Bread)	73	87	58	170	0.38	0.27	2.4	180*	15	0.35	1.4
15141	Pumpkins with Peanut Butter	91	182	0	1090	0.10	0.06	1.6	26	26	0	5.5
15142	Firinda (Skinned bean Stew)	2	4	0	24	0.09	0.05	0.6	69	69	0	1.0

*(15140) includes 97 mcg of FOLAC

CHOLESTEROL, OXALATES AND PHYTATES PER 100 g EDIBLE PORTION ON FRESH WEIGHT BASIS (EP)

Table 2a: Cholesterol per 100 g edible portion on fresh weight basis (EP)

Fode Code	Food name in english	Cholesterol CHOLE (mg)
01003	Biscuit, savoury	4
01004	Biscuit, sweet	12
01011	Buns, currant	1.5
01012	Cake or cupcake, plain butter cake, commercial	82.5
01013	Cake, fruit	38
01014	Cake, sponge, homemade	161
01015	Cake, sponge, without fat	203
01016	Cakes (various fancy iced)	31.1
01036	Scone, plain, commercial	11
06001	Butter (cow milk), no added salt (~80-84% fat)	167
06002	Butter (cow milk), salted (~80% fat)	167
06003	Cheese, cheddar, regular fat	108
06004	Cheese, cottage (cow milk), plain, skimmed	10
06005	Cheese, cottage (cow milk), plain, whole	22
06006	Cheese, cottage, milk, cow, sour	17
06007	Cream, pure, 35% fat	72
06008	Ghee (cow milk)	290
06009	Ice cream, caramel flavour, regular fat	35
06010	Ice cream, chocolate flavour, regular fat	42
06011	Ice cream, strawberry flavour, regular fat	32
06012	Ice cream, vanilla flavour, regular fat	35
06013	Ice cream, vanilla flavour, with nuts, regular fat	34
06014	Milk, camel, whole, fresh, raw	9
06015	Milk, cow, condensed, skimmed, sweetened, raw	8
06016	Milk, cow, condensed, whole, sweetened, raw	31
06017	Milk, cow, powder, skimmed	26
06018	Milk, cow, powder, whole	90
06019	Milk, cow, skimmed, raw	3
06020	Milk, cow, whole, fermented (lala - industrial)	11
06021	Milk, cow, whole, fermented (lala - mursik)	6
06022	Milk, cow, whole, fresh, raw	14
06023	Milk, goat, fluid, whole, raw	9
06024	Milk, human/breast, mature, fluid	14
06025	Milk, sheep, fluid, whole, raw	12
06026	Yoghurt, cow milk, whole, plain	9
07001	Beef, high fat, w/o bones, raw	79
07002	Beef, lean, raw	62
07003	Beef, liver, raw	262
07004	Beef, medium fat, w/o bones, raw	63
07005	Camel blood, raw	
07006	Camel meat, raw	45
07007	Cow's blood, raw	
07008	Duck,meat and skin, raw	99

Fode Code	Food name in english	Cholesterol CHOLE (mg)
07009	Chicken, unespecified part, w/o bones, meat&skin, raw	99
07010	Egg,chicken,white (albumen),raw	0
07011	Egg, chicken, whole, raw	418
07012	Egg,chicken,yolk,raw	1050
07013	Goat blood, raw	
07014	Goat, lean, raw	93
07015	Goat liver, raw	415
07016	Goat, medium fat, raw	93
07017	Guinea fowl, meat, with skin	87
07018	Lamb liver, raw	389
07019	Lamb, raw (unspecified part)	72
07020	Pork, meat,raw (unspecified part)	74
07021	Rabbit meat, raw	67
07022	Sausage, beef, raw	34
07023	Sausage, frankfurters	48
07024	Sausage, liver, raw	158
07025	Sausage, pork, raw	65
07026	Quail, flesh & skin, raw	88
08001	Cod, fillet, raw	49
08002	Dagaa fish (omena), dried, raw	977
08003	Eel, raw	126
08004	Herring stock, raw	62
08005	Lungfish, fillet, raw	61
08006	Mudfish (kamongo), fillet, raw	37
08007	Mackerel, raw	60
08009	Nile perch, fillet w/o bones, raw	75
08010	Nile tilapia, fillet, w/o skin and bones, raw	63
08011	Prawns, flesh, raw	195
08012	Sardine, flesh, raw	49
08013	Shark, raw	24
08014	Tuna, raw	37
09001	Animal fat/ lard	95
09003	Fish liver oil	570
09004	Margarine,20% fat	0
09005	Margarine,60% fat	0.67
09006	Margarine,80% fat	25
15001	Uji wa mahindi (maize porridge)	2
15002	Sorghum, finger millet and maize porridge	2
15003	Kaimati (fried dumplings)	0
15004	Mahamri (swahili doughnuts)	0
15005	Whole maize flour ugali	0
15006	Maize and finger millet flour ugali	0
15007	Maize, red sorghum and finger millet ugali	0
15008	Cassava and red sorghum ugali	0
15009	Refined maize flour ugali	0
15010	Sorghum, maize flour & finger millet ugali	0
15011	Cassava flour ugali	0

Fode Code	Food name in english	Cholesterol CHOLE (mg)
15012	Cassava, millet & sorghum porridge	0
	Cassava porridge (uji wa muhogo)	0
15014	Finger millet porridge (uji wa wimbi)	0
15015	Bulrush millet porridge (uji wa mawele)	0
15016	Rice flour porridge (uji wa mchele)	0
15017	Omena stew (silver sardine stew)	123
15018	"Busara" (whole maize and finger millet porridge)	0
15019	White chapati	0
15020	Brown chapati	0
15022	Fried egg (mayai ya kukaangwa)	431
15023	Omelette	182
15024	Spanish omelette	228
15025	Meat samosa (sambusa ya nyama)	40
15026	Vegetable samosa (sambusa ya mboga)	0
15027	Pancakes (chapati za maji)	54
15028	Tosti mayai (egg toast)	249
15029	Drop scones	59
15030	"Terere" (stir fried amaranth leaves)	0
15031	Sukumawiki (stir fried kales)	0
15032	Stir-fried cabbage	0
15033	Mrenda and seveve (jute mallow and pumpkin leaves)	9
15034	Pumpkin leaves	6
15035	Saget, terere & managu (spider plant, amaranth & african nightshade leaves)	7
15036	Pilau (spiced rice)	12
15037	Mseto wa ndengu (rice with green grams)	0
15038	Mseto wa maharagwe (add rice with beans)	0
15039	Nderema (vine spinach)	13
15040	Fiqe (red sorghum, beans and teff flour)	13
15041	Qanchibelo (beef, maize & wheat flour)	23
15042	Qita (maize and wheat flour pancake)	8
15043	Gurdo, marqa (ugali in sour milk)	24
15044	Mchuzi wa ndengu (green gram stew)	0
15045	Mchuzi wa maharagwe (bean stew)	0
15046	Mchuzi wa ndengu kamande (lentil stew)	0
15047	Nyirinyiri (camel meat)	99
15048	Mbuboyi (blood cooked in fresh milk)	136
15049	Ashir	2
15051	Ugali (cassava, fingermillet and sorghum flour ugali)	0
15052	Yam stew	0
15053	Githeri (stewed maize & beans)	0
15054	Mukimo (maize, beans, potatoes & pumpkin leaves)	0
15055	Githeri (sauteed fresh maize and beans)	0
15056	Matoke (stewed green bananas & meat)	14
15057	Mukimo (fresh maize, potatoes & pumpkin leaves)	0
15058	Stewed potatoes & arrowroots	0
15059	Mukimo wa njahi (black beans, green bananas & potatoes)	0

Fode Code	Food name in english	Cholesterol CHOLE (mg)
15060	Githeri (fresh beans and maize)	0
15061	Mashed potato and bananas	0
15062	Mukimo wa njahi (raw & ripe bananas)	0
15063	Groundnut sauce	9
15064	Vimumunya vya chumvi (pumpkin & coconut milk)	0
15065	Vinolo (banana and maize flour ugali)	0
15066	Biryani rice	0
15066	Biryani stew (swahili spiced beef stew)	21
15067	Vimumunya vya sukari (sweetened pumpkin & coconut milk)	0
15068	Wukunu (sweet potatoes & dehulled black beans)	0
15069	Mushenye (green maize and sweet potatoes)	0
15070	Ingokho (stewed chicken)	93
15071	Malesele (cow blood with sour milk)	250
15073	Ingokho (fried chicken)	236
15074	Wali wa kuchemshwa (boiled rice)	0
15075	Wali wa yasmin (onion fried rice)	0
15076	Stir-fried spinach	0
15077	Thabai / thaa (stinging nettle leaves)	0
15078	Rhikhuvi (stewed cowpea leaves)	4
15079	Kunde and mrenda (stewed cowpeas and jute mallow leaves)	8
15080	Obwoba (stewed mushrooms in peanut butter)	0
15081	Chai ya maziwa (mixed tea)	5
15082	Stewed dried fish	307
15083	Kimanga cha ndizi (smoked green bananas and kidney beans)	0
15084	Kimanga cha mihogo (mashed cassava and pigeon peas)	0
15085	Ndoto (sauteed red kidney beans & red sorghum)	0
15086	Muthokoi (dehulled maize and beans)	0
15087	Beef stew	55
15088	Munono (cow blood, beef, cow fat)	162
15089	Osarge ogkole (fresh blood and fresh milk)	55
15090	Kimanga cha viazi vitamu (mashed sweet potato & black beans)	0
15091	Kitojo (sweet potato leaves)	0
15092	Mchuzi wa mbaazi (pigeon peas stew)	0
15093	Nchenga/ nzenga (crushed maize)	0
15094	Mseto wa viazi (potatoes in rice)	0
15095	Likhanga (stewed guinea fowl)	65
15096	Fried tilapia	145
15097	Stewed green bananas	0
15098	Stir fried beef	81
15099	Stir fried goat meat	154
15100	Finger millet ugali	0
15101	Omena wa kukaangwa (fried omena)	305
15102	Aluru (stewed quails)	49
15103	Mashed potatoes	0
15104	Mashed bananas	0
15105	Enriched mashed potatoes	2
15106	Enriched mashed bananas	2

Fode Code	Food name in english	Cholesterol CHOLE (mg)
15107	Stewed nile perch	55
15108	Stewed goat meat	82
15109	Pan fried sweet potatoes	0
15110	Potato chips	0
15111	Kimito (mashed beans & potatoes)	0
15112	Arrowroot stew	0
15113	Sweet potatoes with peanut butter	0
15114	Black bean stew (dolichos/ njahi stew)	0
15115	Bean stew with milk and cream	8
15116	Mcheleng (rice with milk)	18
15117	Pan fried arrowroots	0
15118	Nyenyi (mashed pigeon peas & green maize)	0
15119	Finger millet and sorghum porridge	8
15120	Mashed pumpkin and black nightshade leaves	0
15121	Enriched matoke	0
15122	Oatmeal	0
15123	Oat porridge (uji wa shayiri)	4
15124	Enriched mandazi (east african doughnuts; enriched)	23
15125	Basic mandazi (east african doughnuts; basic)	0
15126	Stewed split dal	0
15127	Potato curry	0
15128	Peas and brinjal curry	0
15129	Steamed rice (wali wa mvuke)	0
15130	Rotli (indian chapati)	28
15131	Potato bhajia	0
15132	Chaas (diluted yoghurt)	7
15133	Siro (semolina & nuts)	73
15134	Minced meat balls	19
15136	Wheat flour porridge (uji wa ngano)	0
15137	Okra meat dish	23
15138	Hydrabadi biryani	19
15139	Chick peas curry	0
15140	Bhature (fried indian bread)	11
15141	Pumpkins with peanut butter	0
15142	Firinda (skinned bean stew)	0

Table 2b: Oxalate per 100 g edible portion on fresh weight basis (EP)

New code	Food names in English	Scientific name	Oxalic acid OXALAC (mg)
01018	Maize, grain, white variety, whole, dry, raw	Zea mays	tr
01020	Maize meal, sifted, fortified, packaged, raw		tr
01023	Green Maize, white, whole, grain, fresh, raw	Zea mays	12
01025	Millet, bulrush, grain, dry, raw	Pennisetum glaucum	18
01034	Rice, white, milled, polished grain, dry, raw	Oryza sativa	tr
01037	Sorghum, Grain, Red, Dried, Raw	Sorghum bicolor	tr
01039	Sorghum, grain, white, dry, raw	Sorghum bicolor	tr
01043	Wheat Flour (refined/fortified/sifted packaged), raw	Triticum aestivum	tr
02009	Potato, Irish (English), white variety, peeled, raw	Solanum tuberosum L.	14
03004	Beans, Kidney, dry, raw	Phaseolus vulgaris var. Kidney	tr
04001	Amaranth, leaves, picked, raw	Amaranthus gangeticus	323
04003	Black (African) nightshade, indigenous, leaves, picked, raw	Solanum scabrum	18
04007	Cabbage, leaf head, white, raw	Brassica oleracea var. capitata	tr
04011	Carrot, peeled, raw	Daucus carota	15
04015	Cowpea, leaves, picked, raw	Vigna unguiculata	16
04018	Jute mallow, picked leaves, raw	Corchorus olitorius	59
04019	Kale, Ethiopian (kanzera), leaves, raw	Brassica carinata	13
04020	Kale (sukuma wiki) raw	Brassica oleracea var. acephala	18
04027	Pumpkin, flesh, yellow w/o seeds, raw	Cucubita maxima	tr
04031	Spinach, Swiss chard, leaves, raw	Beta vulgaris ssp. vulgaris	819
04032	Squash, butternut,peeled, flesh, raw	Cucurbita moschata	tr
04036	Tomato, red, ripe, raw	Solanum lycopersicum	14
04038	Vine (African) spinach, picked leaves, raw	Basella alba	278
05004	Banana, cavendish, raw	Musa spp.	tr
05005	Baobab fruit, powderly part, dry, raw	Adansonia digitata	24
05011	Guava, pink-fleshed, raw	Psidium guajava	42
05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	Artocarpus heterophyllus	tr
05018	Loquat, peeled, raw	Eriobotrya japonica	tr
05023	Orange, pulp, raw	Citrus sinensis	19
05024	Papaya, yellow skin, peeled, raw	Carica papaya	29
05025	Passion fruit, dark purple skin, raw	Passiflora edulis	tr
05030	Pineapple, raw	Ananas comosus	tr
05037	Tree tomato, dark red skin, peeled, raw	Solanum betaceum	14
05038	Watermelon, fruit, green with white stripes, raw	Citrullus lanatus	tr
10005	Jack fruit, seed, mature, dry, raw	Artocarpus heterophyllus	tr
10009	Nut, ground nut, with skin, unsalted, dry, raw	Arachis hypogaea	14
10010	Nut, macadamia, raw, unsalted	Macadamia F. Muell	tr
10014	Seed, sesame (sim sim) unsalted, dry, raw	Sesamum indicum	22

Table 2c: Phytate per 100 g edible portion on fresh weight basis (EP)

Code	Food names in English	Phytate PHYTCPPD(mg)	IP3 (mg)	IP4 (mg)	IP5 (mg)	IP6 (mg)
01018	Maize, grain, white variety, whole, dry, raw	615				
01020	Maize meal, sifted, fortified, packaged, raw	622				
01022	Maize , whole, flour, raw	615				
01023	Green Maize, white, whole, grain, fresh, raw	210				
01025	Millet, bulrush, grain, dry, raw	474				
01033	Rice, parboiled, raw	268				
01034	Rice, white, milled, polished grain, dry, raw	295				
01035	Semolina, raw	540				
01037	Sorghum, Grain, Red, Dried, Raw	534				
01038	Sorghum, Grain, Red, Flour	534				
01039	Sorghum, grain, white, dry, raw	532				
01042	Wheat Flour-Atta	635				
01043	Wheat Flour (refined/fortified/sifted packaged), raw	123				
01044	Wheat, whole, flour, raw	624				
01045	Wheat, whole, grain, dry, raw	624				
02009	Potato, Irish (English), white variety, peeled, raw	81				
03004	Beans, kidney, dry, raw	623				
03005	Beans, lima, dry, raw		0	10	107	568
03010	Chick peas, whole, dry, raw	569	21	18	85	532
03011	Cowpeas, dry, raw	543	0	22	121	603
03015	Garden peas, fresh, raw	162				
03016	Garden peas, dry, raw	408	0	7	74	453
03017	Gram, black, dry, raw	659				
03019	Gram, green, dry, raw	368				
03020	Lentils, whole, dry, raw	564				
03021	Pigeon peas, dry, raw	585	0	2	123	462
03022	Soybean, dry, raw	425				
04001	Amaranth, leaves, picked, raw	5				
04002	Bitter gourd, whole, different varieties, raw	14				
10002	Coconut, fresh, mature fruit, flesh	136				
10004	COCONUT MEAT, DRIED,(DESICCATED)	390				
10005	Jack fruit, seed, mature, dry, raw	245				
10006	Mustard Seeds, Dry, Raw	129				
10007	Nut, almond, with or without skin, raw, unsalted	964				
10009	Nut, ground nut, with skin, unsalted, dry, raw	589				
10011	Nut, pistachio, raw, unsalted	808				
10012	Peanut Butter	589				

Code	Food names in English	Phytate PHYTCPPD(mg)
15	**MIXED DISHES**	
15001	Uji wa mahindi (Maize Porridge)	60
15002	Sorghum, Finger Millet and Maize Porridge	37
15003	Kaimati (Fried Dumplings)	37
15004	Mahamri (Swahili Doughnuts)	55
15005	Whole Maize Flour Ugali	209
15006	Maize and Finger Millet Flour Ugali	156
15007	Maize, Red Sorghum and Finger Millet Ugali	167
15008	Cassava and Red Sorghum Ugali	108
15009	Refined Maize Flour Ugali	220
15010	Sorghum, Maize flour & Finger Millet Ugali	81
15011	Cassava Flour Ugali	104
15012	Cassava, Millet & Sorghum Porridge	24
15013	Cassava Porridge (Uji wa Muhogo)	12
15014	Finger Millet Porridge (Uji wa Wimbi)	24
15015	Bulrush Millet Porridge (Uji wa Mawele)	73
15016	Rice Flour Porridge (Uji wa Mchele)	4
15017	Omena Stew (Silver Sardine Stew)	1
15018	"Busara" (Whole Maize and Finger Millet Porridge)	31
15019	White Chapati	71
15020	Brown Chapati	338
15022	Fried Egg (Mayai ya Kukaangwa)	0
15023	Omelette	3
15024	Spanish Omelette	2
15025	Meat Samosa (Sambusa ya Nyama)	55
15026	Vegetable Samosa (Sambusa ya Mboga)	90
15027	Pancakes (Chapati za Maji)	49
15028	Tosti Mayai (Egg Toast)	14
15029	Drop Scones	40
15030	"Terere" (Stir fried amaranth leaves)	3
15031	Sukumawiki (Stir fried kales)	5
15032	Stir-fried Cabbage	7
15033	Mrenda and Seveve (Jute Mallow and Pumpkin leaves)	5
15034	Pumpkin Leaves	7
15035	Saget, Terere & Managu (Spider plant, Amaranth & African Nightshade leaves)	12
15036	Pilau (Spiced Rice)	49
15037	Mseto wa Ndengu (Rice with green grams)	55
15038	Mseto wa Maharagwe (Add Rice with Beans)	112
15039	Nderema (Vine Spinach)	16
15040	Fiqe (Red Sorghum, Beans and Teff Flour)	345
15041	Qanchibelo (Beef, Maize & Wheat Flour)	58
15042	Qita (Maize and Wheat flour pancake)	210
15043	Gurdo, Marqa (Ugali in Sour Milk)	324
15044	Mchuzi wa ndengu (Green Gram Stew)	68
15045	Mchuzi wa Maharagwe (Bean Stew)	84

Code	Food names in English	Phytate PHYTCPPD(mg)
15	**MIXED DISHES**	
15046	Mchuzi wa Ndengu Kamande (Lentil Stew)	111
15047	Nyirinyiri (Camel meat)	0
15048	Mbuboyi (Blood Cooked in Fresh Milk)	0
15051	Ugali (Cassava, Fingermillet and Sorghum Flour Ugali)	113
15052	Yam Stew	16
15053	Githeri (stewed Maize & Beans)	178
15054	Mukimo (Maize, Beans, Potatoes & Pumpkin Leaves)	123
15055	Githeri (Sauteed Fresh Maize and beans)	172
15056	Matoke (Stewed Green Bananas & Meat)	22
15057	Mukimo (Fresh Maize, Potatoes & Pumpkin Leaves)	65
15058	Stewed Potatoes & Arrowroots	18
15059	Mukimo wa Njahi (Black Beans, Green Bananas & Potatoes)	172
15060	Githeri (Fresh beans and Maize)	48
15061	Mashed Potato and Bananas	39
15062	Mukimo wa Njahi (Raw & Ripe Bananas)	111
15063	Groundnut Sauce	198
15064	Vimumunya vya Chumvi (Pumpkin & Coconut Milk)	21
15065	Vinolo (Banana and Maize Flour Ugali)	136
15066	Biryani rice	54
15066	Biryani stew (Swahili Spiced Beef Stew)	11
15067	Vimumunya vya Sukari (Sweetened Pumpkin & Coconut Milk)	16
15068	Wukunu (Sweet potatoes & Dehulled Black Beans)	68
15069	Mushenye (Green Maize and Sweet Potatoes)	174
15070	Ingokho (Stewed Chicken)	3
15071	Malesele (Cow Blood with Sour Milk)	2
15072	Tsiswa (Stewed termites)	1
15073	Ingokho (Fried Chicken)	0
15074	Wali wa Kuchemshwa (Boiled Rice)	53
15075	Wali wa Yasmin (Onion Fried Rice)	59
15076	Stir-fried Spinach	9
15077	Thabai / Thaa (Stinging Nettle Leaves)	4
15078	Rhikhuvi (Stewed Cowpea Leaves)	47
15079	Kunde and Mrenda (Stewed Cowpeas and Jute Mallow leaves)	14
15080	Obwoba (Stewed Mushrooms in Peanut Butter)	60
15081	Chai ya Maziwa (Mixed Tea)	0
15082	Stewed Dried Fish	25
15083	Kimanga cha Ndizi (Smoked Green Bananas and Kidney Beans)	148
15084	Kimanga Cha Mihogo (Mashed Cassava and Pigeon Peas)	167
15085	Ndoto (Sauteed Red Kidney Beans & Red Sorghum)	148
15086	Muthokoi (Dehulled Maize and Beans)	
15087	Beef Stew	1
15088	Munono (Cow blood, beef, cow fat)	0
15089	Osarge Ogkole (Fresh blood and Fresh milk)	0
15090	Kimanga cha Viazi Vitamu (Mashed Sweet Potato & Black Beans)	97
15091	Kitojo (Sweet Potato Leaves)	15
15092	Mchuzi wa Mbaazi (Pigeon Peas Stew)	124

Code	Food names in English	Phytate PHYTCPPD(mg)
15	**MIXED DISHES**	
15094	Mseto wa Viazi (Potatoes in Rice)	40
15095	Likhanga (Stewed Guinea Fowl)	1
15096	Fried tilapia	0
15097	Stewed Green Bananas	11
15098	Stir Fried Beef	2
15099	Stir Fried Goat Meat	3
15100	Finger Millet Ugali	100
15101	Omena wa Kukaangwa (Fried Omena)	3
15102	Aluru (Stewed Quails)	1
15103	Mashed Potatoes	48
15104	Mashed Bananas	18
15105	Enriched Mashed Potatoes	39
15106	Enriched Mashed Bananas	15
15107	Stewed Nile Perch	1
15108	Stewed Goat Meat	1
15109	Pan Fried Sweet Potatoes	56
15110	Potato Chips	93
15111	Kimito (Mashed Beans & Potatoes)	134
15112	Arrowroot Stew	19
15113	Sweet Potatoes with Peanut Butter	42
15114	Black Bean Stew (Dolichos/ Njahi Stew)	62
15115	Bean Stew with Milk and Cream	153
15116	Mcheleng (Rice with Milk)	48
15117	Pan Fried Arrowroots	21
15118	Nyenyi (Mashed Pigeon Peas & Green Maize)	108
15119	Finger Millet and Sorghum Porridge	36
15120	Mashed Pumpkin and Black Nightshade Leaves	22
15121	Enriched Matoke	48
15122	Oatmeal	316
15123	Oat Porridge (Uji wa Shayiri)	128
15125	Basic Mandazi (East African Doughnuts; Basic)	58
15126	Stewed Split Dal	74
15127	Potato Curry	41
15128	Peas and Brinjal Curry	66
15129	Steamed Rice (Wali wa Mvuke)	51
15130	Rotli (Indian Chapati)	370
15131	Potato Bhajia	190
15132	Chaas (Diluted Yoghurt)	0
15133	Siro (Semolina & Nuts)	91
15134	Minced Meat Balls	34
15136	Wheat Flour Porridge (Uji wa Ngano)	45
15137	Okra Meat Dish	2
15138	Hydrabadi Biryani	48
15139	Chick Peas Curry	123
15140	Bhature (Fried Indian Bread)	46
15141	Pumpkins with Peanut Butter	48
15142	Firinda (Skinned bean Stew)	156

AMINO ACIDS

Table 3a: Amino acids mg per 100 g edible portion on fresh weight basis (EP)

New code	Food name in English	Isoleucin	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Tyrosine	Threonine	Tryptophan	Valine	Arginine	Histidine	Alanine	Aspartic acid	Glutamic acid	Glycine	Proline	Serine
		ILE (mg)	LEU (mg)	LYS (mg)	MET (mg)	CYS (mg)	PHE (mg)	TYR (mg)	THR (mg)	TRP (mg)	VAL (mg)	ARG (mg)	HIS (mg)	ALA (mg)	ASP (mg)	GLU (mg)	GLY (mg)	PRO (mg)	SER (mg)
01018	Maize, grain, white variety, whole, dry, raw	320	1130	330	tr	tr	410	385	405	tr	435	530	214	705	380	1680	325	890	540
01023	Green Maize, white, whole, grain, fresh, raw	160	410	200	68	48	240	245	185	24	160	220	87	350	375	814	183	365	247
01020	Maize meal, sifted, fortified, packaged, raw	270	1020	275	tr	tr	400	390	335	tr	370	420	310	600	230	1480	195	835	310
01025	Millet, bulrush, grain, dry, raw	440	1010	480	240	100	600	350	370	140	610	340	210	800	850	2070	300	660	330
01039	Sorghum, grain, white, dry, raw	555	1520	375	173	156	575	311	450	80	670	495	330	1200	590	2530	235	1060	455
01034	Rice, white, milled, polished grain, dry, raw	350	720	365	192	115	440	440	294	80	555	700	166	485	585	1500	365	455	565
01043	Wheat Flour (refined/fortified/sifted packaged), raw	370	710	390	110	150	610	330	270	100	460	350	220	310	470	3650	300	1220	350
01045	Wheat, whole, grain, dry, raw	530	985	455	203	tr	590	410	420	115	585	660	345	475	480	3900	500	1400	540
02009	Potato, Irish (English), white variety, peeled, raw	98	200	190	39	30	107	125	87	38	136	160	53	74	589	404	72	115	106
03004	Beans, Kidney, dry, raw	1250	2020	1430	271	98	1220	640	950	190	1490	1260	525	960	2940	3560	880	900	1180
03015	Garden peas, fresh, raw	380	655	620	50	51	360	290	225	67	430	420	215	495	625	1340	280	385	245
03017	Gram, black, dry, raw	1340	2280	1920	265	143	1420	720	900	180	1800	1700	720	1230	3210	4600	1060	1180	1300
04032	Squash, butternut, peeled, flesh, raw	56	81	53	17	13	56	48	43	20	62	90	27	60	230	185	53	52	56
04020	Kale (sukuma wiki) raw	160	250	190	29	40	220	125	165	36	220	175	62	185	360	430	180	165	155
04019	Kale, Ethiopian (kanzera), leaves, raw	155	250	205	31	43	235	120	165	39	245	115	85	225	335	435	170	140	145
04018	Jute mallow, picked leaves, raw	200	335	230	65	tr	300	155	170	70	255	245	95	250	470	445	240	210	155
04038	Vine (African) spinach, picked leaves, raw	140	230	215	tr	tr	195	125	135	tr	175	185	70	165	275	370	180	135	135
04015	Cowpea, leaves, picked, raw	205	350	225	40	tr	260	180	205	55	255	205	70	280	435	390	230	185	150
04003	Black (African) nightshade, indigenous, leaves, picked, raw	205	350	215	71	47	290	165	155	65	255	210	90	240	460	435	230	180	150
05038	Watermelon, fruit, green with white stripes, raw	19	18	62	6	2	15	12	27	7	16	59	6	17	39	60	10	24	16
05004	Banana, cavendish, raw	34	85	50	11	17	55	25	35	12	75	48	84	40	130	115	38	41	48
05025	Passion fruit, dark purple skin, raw	100	155	110	tr	tr	235	75	85	tr	145	305	tr	145	295	530	150	175	145
05030	Pineapple, raw	13	19	19	5	11	12	15	14	5	20	13	7	33	130	72	26	18	25
05018	Loquat, peeled, raw	25	43	38	7	10	23	21	25	8	35	23	12	40	60	60	33	45	33

New code	Food name in English	Isoleucin	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Tyrosine	Threonine	Tryptophan	Valine	Arginine	Histidine	Alanine	Aspartic acid	Glutamic acid	Glycine	Proline	Serine
		ILE (mg)	**LEU (mg)**	**LYS (mg)**	**MET (mg)**	**CYS (mg)**	**PHE (mg)**	**TYR (mg)**	**THR (mg)**	**TRP (mg)**	**VAL (mg)**	**ARG (mg)**	**HIS (mg)**	**ALA (mg)**	**ASP (mg)**	**GLU (mg)**	**GLY (mg)**	**PRO (mg)**	**SER (mg)**
05011	Guava, pink-fleshed, raw	43	70	30	10	11	17	29	41	8	53	36	20	60	135	235	100	62	60
05023	Orange, pulp, raw	23	22	44	19	10	28	15	14	9	37	60	16	47	125	70	88	55	30
05003	Avocado, ripe, raw	65	85	80	26	25	67	42	65	16	85	60	38	75	155	150	85	70	85
05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	49	95	47	8	7	63	85	61	9	73	45	23	87	371	130	76	85	76
05037	Tree tomato, dark red skin, peeled, raw	75	80	105	tr	tr	70	Tr	60	tr	60	tr	tr	50	255	905	80	65	105
06022	Milk, cow, whole, fresh, raw	168	367	303	70	40	149	182	152	38	228	128	105	138	250	694	81	322	201
06020	Milk, cow, whole, fermented (Lala - Industrial)	129	285	215	51	41	103	124	136	33	171	209	96	106	259	523	62	302	215
06021	Milk, cow, whole, fermented (Lala - mursik)	146	329	278	77	39	157	181	160	45	159	231	83	104	217	578	63	283	222
06026	Yoghurt, cow milk, whole, plain	131	293	259	52	40	122	127	145	3	162	120	75	97	255	557	63	291	223
06014	Milk, camel, whole, fresh, raw	142	256	113	78	28	99	83	90	55	188	73	66	80	113	384	41	263	87
07011	Egg, chicken, whole, raw	750	1230	669	456	284	602	473	494	196	929	811	251	958	1010	970	453	479	747
07001	Beef, high fat, w/o bones, raw	745	1200	1530	266	745	503	359	455	81	1350	745	555	1210	1570	2980	1100	986	505
07004	Beef, medium fat, w/o bones, raw	983	1540	1700	377	54	663	512	573	127	1780	1290	770	1610	2030	3530	1110	1050	562
07002	Beef, lean, raw	926	1630	1780	413	54	737	594	590	126	1620	1350	904	1440	2080	3850	1100	941	546
07016	Goat, medium fat, raw	704	1310	1410	406	75	657	504	736	222	1270	1360	569	1330	1590	2290	1610	1140	432
07014	Goat, lean, raw	877	1680	1920	491	88	762	608	928	134	1530	1430	588	1590	1360	1660	1040	782	428
07009	Chicken, unespecified part, w/o bone, meat&skin, raw	866	1520	2030	478	84	716	552	773	160	1370	1180	619	1190	1490	2030	897	684	376
07022	Sausage, beef, raw	452	843	904	224	126	450	379	474	111	567	799	341	842	1030	2060	1250	1020	433
07003	Beef, liver, raw	718	1720	1690	421	84	923	635	2370	161	1650	1240	569	1360	1420	1770	1220	873	444
08010	Nile tilapia, fillet, w/o skin an bones, raw	805	1420	1620	515	79	722	552	759	203	1290	1260	562	1170	1680	2960	1100	706	449
08005	Lungfish, fillet, raw	812	1310	1890	379	91	619	449	694	105	1350	951	477	1300	1270	1910	1070	679	307
08009	Nile perch, fillet w/o bones, raw	871	1510	1630	559	84	778	602	857	197	1410	1140	495	1220	1960	2910	933	736	439
08002	Dagaa fish (omena), raw, dried	2720	4210	5090	1470	559	2080	1620	2080	377	3960	3560	2380	3700	6810	8200	2930	2950	2330
10010	Nut, macadamia, raw, unsalted	290	573	420	70	5	307	457	313	0	297	1080	210	370	750	2050	403	523	327
10005	Jack fruit, seed, mature, dry, raw	420	495	212	53	31	445	480	450	85	435	172	96	160	500	730	395	395	302
10009	Nut, ground nut, with skin, unsalted, dry, raw	983	1840	714	150	277	1330	1020	790	183	834	2760	607	1140	2420	4160	1740	877	1390
10014	Seed, sesame (sim sim) unsalted, dry, raw	833	1510	767	593	343	973	820	837	213	1130	2350	540	1020	1750	4060	1060	813	920

Table 3b: Amino acids per gram Nitrogen

New code	Food name in English	Isoleucin	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Tyrosine	Threonine	Tryptophan	Valine	Arginine	Histidine	Alanine	Aspartic acid	Glutamic acid	Glycine	Proline	Serine
		ILE (mg)	LEU (mg)	LYS (mg)	MET (mg)	CYS (mg)	PHE (mg)	TYR (mg)	THR (mg)	TRP (mg)	VAL (mg)	ARG(mg)	HIS (mg)	ALA (mg)	ASP (mg)	GLU (mg)	GLY (mg)	PRO (mg)	SER (mg)
01018	Maize, grain, white variety, whole, dry, raw	252	890	260	tr	tr	323	303	319	tr	343	417	169	555	299	1320	256	701	425
01023	Green Maize, white, whole, grain, fresh, raw	246	631	308	104	74	369	377	285	36	246	339	134	539	578	1250	281	562	379
01020	Maize meal, sifted, fortified, packaged, raw	247	928	252	tr	tr	366	357	306	tr	338	384	284	549	210	1350	178	764	284
01025	Millet, bulrush, grain, dry, raw	262	601	286	143	60	357	208	220	83	363	202	125	476	506	1230	179	393	196
01039	Sorghum, grain, white, dry, raw	321	880	217	100	90	332	180	260	46	387	286	191	694	341	1460	136	610	263
01034	Rice, white, milled, polished grain, dry, raw	274	563	285	150	90	344	344	230	63	434	547	130	379	457	1180	285	356	442
01043	Wheat Flour (refined/ fortified/sifted packaged), raw	188	361	198	56	76	310	168	137	51	234	178	112	158	239	1860	153	621	178
01045	Wheat, whole, grain, dry, raw	266	495	229	102	tr	297	206	211	58	294	332	173	239	241	1960	251	706	271
02009	Potato, Irish (English), white variety, peeled, raw	250	510	485	100	77	273	319	223	96	346	408	135	188	1500	1030	185	293	269
03004	Beans, Kidney, dry, raw	383	614	436	83	30	372	195	290	58	454	384	160	293	895	1090	268	274	358
03017	Garden peas, fresh, raw	300	517	489	39	40	284	229	178	53	339	332	170	391	493	1050	221	304	193
03016	Gram, black, dry, raw	342	580	487	67	36	360	183	229	46	459	433	183	313	816	1170	271	300	329
04032	Squash, butternut, peeled, flesh, raw	238	350	227	73	54	238	208	185	85	265	387	115	258	988	795	227	223	238
04020	Kale (sukuma wiki) raw	334	522	396	60	83	459	261	344	75	459	365	130	386	751	897	376	344	323
04019	Kale, Ethiopian (kanzera), leaves, raw	297	479	393	60	83	451	230	316	75	470	220	163	431	642	834	326	268	278
04018	Jute mallow, picked leaves, raw	271	454	311	88	tr	406	210	230	95	345	332	129	339	637	603	325	284	210
04038	Vine (African) spinach, picked leaves, raw	255	418	391	tr	tr	355	227	246	tr	318	337	127	300	500	673	328	246	246
04015	Cowpea, leaves, picked, raw	379	646	415	74	tr	480	332	379	102	471	379	129	517	803	720	425	342	277

New code	Food name in English	Isoleucin	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Tyrosine	Threonine	Tryptophan	Valine	Arginine	Histidine	Alanine	Aspartic acid	Glutamic acid	Glycine	Proline	Serine
		ILE (mg)	LEU (mg)	LYS (mg)	MET (mg)	CYS (mg)	PHE (mg)	TYR (mg)	THR (mg)	TRP (mg)	VAL (mg)	ARG(mg)	HIS (mg)	ALA (mg)	ASP (mg)	GLU (mg)	GLY (mg)	PRO (mg)	SER (mg)
04003	Black (African) nightshade, indigenous, leaves, picked, raw	335	572	351	115	76	474	270	253	106	417	343	147	392	752	711	376	294	245
05038	Watermelon, fruit, green with white stripes, raw	200	186	643	64	21	157	121	279	71	164	614	64	179	407	625	107	250	164
05004	Banana, cavendish, raw	200	494	290	67	100	320	143	205	71	436	281	486	233	756	669	224	238	281
05025	Passion fruit, dark purple skin, raw	265	411	292	tr	tr	624	199	226	tr	385	809	tr	385	783	1410	398	464	385
05030	Pineapple, raw	163	248	252	66	139	162	194	188	68	254	165	86	434	1690	933	333	235	332
05018	Loquat, peeled, raw	250	433	383	67	100	233	217	250	83	350	233	117	400	605	605	333	450	333
05011	Guava, pink-fleshed, raw	246	403	173	56	64	97	164	236	48	302	207	115	346	778	1350	576	354	346
05023	Orange, pulp, raw	162	154	308	131	69	200	108	100	62	262	423	115	331	878	492	615	386	208
05003	Avocado, ripe, raw	257	336	316	104	99	265	165	257	65	336	237	149	297	613	593	336	277	336
05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	218	423	208	34	31	281	376	272	39	324	201	102	385	1640	578	338	376	337
05037	Tree tomato, dark red skin, peeled, raw	222	236	310	tr	tr	207	tr	177	tr	177	tr	tr	148	754	2670	236	192	310
06022	Milk, cow, whole, fresh, raw	323	703	580	134	77	285	349	292	73	436	246	202	264	479	1330	155	616	385
06020	Milk, cow, whole, fermented (Lala - Industrial)	295	652	493	116	93	237	283	311	76	392	478	220	243	592	1200	141	692	491
06021	Milk, cow, whole, fermented (Lala - mursik)	302	681	576	159	80	326	374	332	93	329	478	172	214	449	1200	130	586	460
06026	Yoghurt, cow milk, whole, plain	291	650	574	115	88	271	282	321	6	360	267	166	215	566	1240	139	646	496
06014	Milk, camel, whole, fresh, raw	415	745	329	228	82	288	241	263	160	548	213	193	232	330	1120	120	765	253
07011	Egg, chicken, whole, raw	370	606	330	225	140	297	233	244	97	458	400	124	473	498	478	223	236	368
07001	Beef, high fat, w/o bones, raw	250	401	511	89	250	169	120	152	27	453	250	186	405	528	1000	369	331	169
07004	Beef, medium fat, w/o bones, raw	312	488	540	120	17	211	163	182	40	564	410	245	513	644	1120	353	334	179
07002	Beef, lean, raw	282	496	540	126	16	224	181	179	38	493	410	275	439	632	1170	335	286	166
07016	Goat, medium fat, raw	237	441	473	136	25	221	169	248	75	428	458	191	446	535	769	542	384	145
07014	Goat, lean, raw	281	537	613	157	28	244	195	297	43	492	458	188	508	436	533	332	251	137

New code	Food name in English	Isoleucin	Leucine	Lysine	Methionine	Cystine	Phenylalanine	Tyrosine	Threonine	Tryptophan	Valine	Arginine	Histidine	Alanine	Aspartic acid	Glutamic acid	Glycine	Proline	Serine
		ILE (mg)	LEU (mg)	LYS (mg)	MET (mg)	CYS (mg)	PHE (mg)	TYR (mg)	THR (mg)	TRP (mg)	VAL (mg)	ARG(mg)	HIS (mg)	ALA (mg)	ASP (mg)	GLU (mg)	GLY (mg)	PRO (mg)	SER (mg)
07009	Chicken, unespecified part, w/o bone, meat&skin, raw	289	506	677	159	28	239	184	258	53	457	393	207	398	498	678	299	228	126
07022	Sausage, beef, raw	235	437	469	116	65	234	197	246	58	295	415	177	437	535	1070	647	532	225
07003	Beef, liver, raw	225	538	531	132	26	289	199	742	51	520	388	178	425	445	555	382	274	139
08010	Nile tilapia, fillet, w/o skin an bones, raw	255	449	513	163	25	229	175	240	64	409	397	178	370	531	936	349	224	142
08005	Lungfish, fillet, raw	320	515	743	149	36	244	177	273	41	534	375	188	512	500	753	422	267	121
08009	Nile perch, fillet w/o bones, raw	286	496	536	184	28	256	198	282	65	464	375	162	399	645	955	307	242	144
08002	Dagaa fish (omena), raw, dried	285	443	535	155	59	219	170	218	40	417	375	250	388	716	862	308	310	245
10010	Nut, macadamia, raw, unsalted	226	448	328	55	4	239	357	245		232	843	164	289	585	1600	315	409	255
10005	Jack fruit, seed, mature, dry, raw	462	544	233	59	34	489	528	495	93	478	189	106	176	550	803	434	434	332
10009	Nut, ground nut, with skin, unsalted, dry, raw	267	499	194	41	75	363	277	215	50	227	750	165	309	660	1130	474	239	379
10014	Seed, sesame (sim sim) unsalted, dry, raw	288	522	265	205	119	336	283	289	74	391	813	187	353	604	1400	365	281	318

FATTY ACIDS

Table 4a(i): Fatty acids fractions per 100 g edible portion on fresh weigh basis (EP)

New code	Food name in English	Fat, total	Fatty acids, total	Fatty acids, total saturated	Fatty acids, total monounsaturated	Fatty acids, total polyunsaturated	Fatty acids, total trans	Other fatty acids, not specifiied	Sum of polyunsaturated FA, n-3	Sum of polyunsaturated FA, n-6
		FAT(g)	FACID(g)	FASAT(g)	FAMS(g)	FAPU(g)	FATRN(g)	FAUN(g)	FAPUN3(g)	FAPUN6(g)
01018	Maize, grain, white variety, whole, dry, raw	4.50	3.58	0.61	1.32	1.57	tr	0.07	0.04	1.54
01020	Maize meal, sifted, fortified, packaged, raw	3.00	2.39	0.44	0.95	0.99	tr	0	0.03	0.96
01023	Green Maize, white, whole, grain, fresh, raw	2.50	2.30	0.45	0.86	0.99	tr	0	0.02	0.96
01025	Millet, bulrush, grain, dry, raw	5.30	4.56	1.08	1.34	2.13	0.01	tr	0.13	2.00
01039	Sorghum, grain, white, dry, raw	3.50	3.01	0.59	1.20	1.29	0.01	0	0.03	1.26
01034	Rice, white, milled, polished grain, dry, raw	1.00	0.85	0.29	0.31	0.24	tr	0	0.01	0.23
01043	Wheat Flour (refined/fortified/sifted packaged), raw	1.60	1.07	0.22	0.19	0.66	tr	0	0.04	0.62
01045	Wheat, whole, grain, dry, raw	2.50	1.80	0.36	0.37	1.07	tr	tr	0.08	0.99
03004	Beans, kidney, dry, raw	2.00	1.60	0.26	0.18	1.16	0.01	tr	0.78	0.37
03015	Garden peas, fresh, raw	0.70	0.56	0.16	0.16	0.26	tr	0	0.04	0.22
03017	Gram, black, dry, raw	1.70	1.36	0.47	0.17	0.77	tr	0	0.49	0.28
05003	Avocado, ripe, raw	19.6	18.74	3.28	13.5	1.91	0.01	tr	0.13	1.79
06022	Milk, cow, whole, fresh, raw	3.54	3.45	2.32	0.89	0.09	0.15	0	0.03	0.09
06020	Milk, cow, whole, fermented (Lala - Industrial)	4.09	2.73	1.79	0.71	0.08	0.14	0	0.04	0.07
06021	Milk, cow, whole, fermented (Lala - mursik)	3.52	3.34	2.12	0.97	0.09	0.16	0	0.05	0.08
06026	Yoghurt, cow milk, whole, plain	3.09	2.65	1.74	0.70	0.07	0.13	tr	0.03	0.07
06014	Milk, camel, whole, fresh, raw	2.83	2.69	1.57	0.89	0.10	0.12	tr	0.05	0.09
07011	Egg, chicken, whole, raw	8.14	7.00	2.30	2.92	1.78	tr	tr	0.11	1.67
07022	Sausage, beef, raw	16.3	16.21	7.39	6.10	2.26	0.46	tr	0.19	2.17
07001	Beef, high fat, w/o bones, raw	24.1	22.94	12.4	8.71	0.80	1.03	0.03	0.39	0.62
07004	Beef, medium fat, w/o bones, raw	7.21	6.82	3.55	2.75	0.22	0.29	0	0.10	0.18
07002	Beef, lean, raw	2.27	2.09	1.13	0.74	0.15	0.07	0	0.04	0.13
07016	Goat, medium fat, raw	8.62	8.17	4.39	2.96	0.42	0.38	0.01	0.15	0.37
07014	Goat, lean, raw	4.28	4.06	2.07	1.54	0.24	0.19	0.01	0.06	0.23
07009	Chicken, unespecified part, w/o bones, meat&skin, raw	13.0	12.33	3.71	5.71	2.85	0.05	0	0.14	2.73
07003	Beef, liver, raw	4.20	3.11	1.44	0.53	1.07	0.08	0	0.42	0.67
08010	Nile tilapia, fillet, w/o skin and bones, raw	1.49	1.25	0.43	0.42	0.40	tr	0	0.10	0.30
08005	Lungfish, fillet, raw	1.03	0.81	0.30	0.23	0.28	tr	0	0.14	0.14

New code	Food name in English	Fat, total	Fatty acids, total	Fatty acids, total saturated	Fatty acids, total mono-unsaturated	Fatty acids, total poly-unsaturated	Fatty acids, total trans	Other fatty acids, not specifiied	Sum of polyunsaturated FA, n-3	Sum of polyunsaturated FA, n-6
		FAT(g)	**FACID(g)**	**FASAT(g)**	**FAMS(g)**	**FAPU(g)**	**FATRN(g)**	**FAUN(g)**	**FAPUN3(g)**	**FAPUN6(g)**
08009	Nile perch, fillet w/o bones, raw	0.87	0.67	0.23	0.17	0.27	tr	0	0.18	0.09
08002	Dagaa fish (omena), dried, raw	10.6	9.75	3.84	2.24	3.47	0.11	0.09	2.63	0.91
09002	Corn oil	99.9	95.54	15.1	33.9	42.5	4.02	0.02	0.37	42.1
09012	Soya bean oil	100	95.55	15.8	24.4	50.7	4.70	0	4.08	46.6
10010	Nut, macadamia, raw, unsalted	70.9	67.78	10.9	55.5	1.36	0.03	0	0.12	1.24
10005	Jack fruit, seed, mature, dry, raw	0.60	0.57	0.26	0.12	0.19	0.00	tr	0.02	0.17
10009	Nut, ground nut, with skin, unsalted, dry, raw	48.4	46.27	9.76	22.6	13.9	0.03	0.01	0.05	13.9
10014	Seed, sesame (sim sim) unsalted, dry, raw	54.1	51.72	7.55	18.2	23.8	0.05	2.09	0.22	23.6

Table 4a(ii): Fatty acids, saturated per 100 g edible portions on fresh weight basis (EP)

Food Code	Food name in English	Fatty acid 4:0	Fatty acid 6:0	Fatty acid C7:0	Fatty acid 8:0	Fatty acid 9:0	Fatty acid 10:0	Fatty acid 11:0	Fatty acid 12:0	Fatty acid 13:0	Fatty acid 14:0	Fatty acid 15:0	Fatty acid 16:0	Fatty acid 17:0	Fatty acid 18:0	Fatty acid 19:0	Fatty acid 20:0	Fatty acid 21:0	Fatty acid 22:0	Fatty acid 23:0	Fatty acid 24:0
		F4D0 (g)	F6D0 (g)	F7D0 (g)	F8D0 (g)	F9D0 (g)	F10D0 (g)	F11D0 (g)	F12D0 (g)	F13D0 (g)	F14D0 (g)	F15D0 (g)	F16D0 (g)	F17D0 (g)	F18D0 (g)	F19D0 (g)	F20D0 (g)	F21D0 (g)	F22D0 (g)	F23D0 (g)	F24D0 (g)
01018	Maize, grain, white variety, whole, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.46	tr	0.10	tr	0.02	tr	0.01	tr	0.01
01020	Maize meal, sifted, fortified, packaged, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.01	tr	0.31	tr	0.08	tr	0.01	tr	tr	tr	0.01
01023	Green Maize, white, whole, grain, fresh, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.34	tr	0.07	tr	0.01	tr	tr	tr	tr
01025	Millet, bulrush, grain, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.01	tr	0.80	tr	0.20	tr	0.04	tr	0.01	tr	0.01
01039	Sorghum, grain, white, dry, raw	tr	tr	tr	0.01	tr	tr	tr	tr	tr	tr	tr	0.49	tr	0.06	tr	0.01	tr	tr	tr	0.01
01034	Rice, white, milled, polished grain, dry, raw	tr	tr	tr	tr	tr	tr	tr	0.01	tr	0.02	tr	0.21	tr	0.04	tr	0.01	tr	tr	tr	tr
01043	Wheat Flour (refined/ fortified/sifted packaged), raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.19	tr	0.02	tr	tr	tr	tr	tr	tr
01045	Wheat, whole, grain, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.32	tr	0.03	tr	tr	tr	tr	tr	tr
03004	Beans, kidney, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.18	tr	0.04	tr	0.01	tr	0.01	tr	0.01
03015	Garden peas, fresh, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.01	tr	0.10	tr	0.03	tr	tr	tr	tr	tr	tr
03017	Gram, black, dry, raw	tr	tr	tr	tr	tr	tr	tr	0.01	tr	0.01	tr	0.30	tr	0.08	tr	0.02	tr	0.03	tr	0.02
05003	Avocado, ripe, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.01	tr	3.05	tr	0.17	tr	0.02	tr	0.01	tr	0.01
06022	Milk, cow, whole, fresh, raw	0.16	0.08		0.04		0.07		0.08	tr	0.34	0.05	1.02	0.04	0.43		tr	tr	tr	tr	tr
06020	Milk, cow, whole, fermented (Lala - Industrial)	0.13	0.06		0.03		0.06		0.07	tr	0.26	0.04	0.75	0.03	0.37		tr	tr	tr	tr	tr
06021	Milk, cow, whole, fermented (Lala - mursik)	0.15	0.07		0.04		0.07		0.07	tr	0.30	0.05	0.87	0.04	0.45		tr	tr	tr	tr	tr
06026	Yoghurt, cow milk, whole, plain	0.13	0.06		0.03		0.06		0.06	tr	0.25	0.03	0.72	0.03	0.37		tr	tr	tr	tr	tr
06014	Milk, camel, whole, fresh, raw	tr	tr		tr		tr		0.02	tr	0.25	0.04	0.83	0.03	0.39		tr	tr	tr	tr	tr
07011	Egg, chicken, whole, raw	tr	tr		tr		tr		tr	tr	0.02	tr	1.70	0.03	0.54		tr	tr	tr	tr	tr
07022	Sausage, beef, raw	tr	tr		tr		0.01		0.02	tr	0.35	0.05	4.27	0.17	2.48		0.04	tr	tr	tr	tr

Food Code	Food name in English	Fatty acid 4:0	Fatty acid 6:0	Fatty acid C7:0	Fatty acid 8:0	Fatty acid 9:0	Fatty acid 10:0	Fatty acid 11:0	Fatty acid 12:0	Fatty acid 13:0	Fatty acid 14:0	Fatty acid 15:0	Fatty acid 16:0	Fatty acid 17:0	Fatty acid 18:0	Fatty acid 19:0	Fatty acid 20:0	Fatty acid 21:0	Fatty acid 22:0	Fatty acid 23:0	Fatty acid 24:0
		F4D0 (g)	F6D0 (g)	F7D0 (g)	F8D0 (g)	F9D0 (g)	F10D0 (g)	F11D0 (g)	F12D0 (g)	F13D0 (g)	F14D0 (g)	F15D0 (g)	F16D0 (g)	F17D0 (g)	F18D0 (g)	F19D0 (g)	F20D0 (g)	F21D0 (g)	F22D0 (g)	F23D0 (g)	F24D0 (g)
07001	Beef, high fat, w/o bones, raw	tr	tr		tr		0.02		0.03	tr	0.90	0.14	6.00	0.38	4.81		0.08	tr	tr	tr	tr
07004	Beef, medium fat, w/o bones, raw	tr	tr		tr		tr		tr	tr	0.23	0.04	1.73	0.12	1.42		0.02	tr	tr	tr	tr
07002	Beef, lean, raw	tr	tr		tr		tr		tr	tr	0.07	0.01	0.52	0.04	0.48		tr	tr	tr	tr	tr
07016	Goat, medium fat, raw	tr	tr		tr		0.01		0.01	tr	0.22	0.09	1.87	0.22	1.94		0.02	tr	tr	tr	tr
07014	Goat, lean, raw	tr	tr		tr		tr		tr	tr	0.10	0.03	0.89	0.10	0.94		0.01	tr	tr	tr	tr
07009	Chicken, unespecified part, w/o bones, meat&skin, raw	tr	tr		tr		tr		tr	tr	0.07	tr	2.88	0.02	0.73		0.01	tr	tr	tr	tr
07003	Beef, liver, raw	tr	tr		tr		tr		tr	tr	0.03	0.01	0.45	0.05	0.87		tr	tr	tr	0.01	0.01
08010	Nile tilapia, fillet, w/o skin and bones, raw	tr	tr		tr		tr		tr	tr	0.04	tr	0.30	0.01	0.08		tr	tr	tr	tr	tr
08005	Lungfish, fillet, raw	tr	tr		tr		tr		tr	tr	0.03	tr	0.18	0.02	0.08		tr	tr	tr	tr	tr
08009	Nile perch, fillet w/o bones, raw	tr	tr		tr		tr		tr	tr	tr	tr	0.16	tr	0.07		tr	tr	tr	tr	tr
08002	Dagaa fish (omena), dried, raw	tr	tr		tr		tr		0.01	tr	0.39	0.06	2.35	0.21	0.78		0.04	tr	tr	tr	tr
09002	Corn oil	tr	tr	tr	tr	tr	tr		0.04	tr	0.05	tr	11.6	0.08	2.41	tr	0.54	tr	0.19	tr	0.21
09012	Soya bean oil	tr	tr	tr	tr	tr	tr		0.03	tr	0.09	tr	10.3	0.09	4.30	tr	0.42	tr	0.43	tr	0.16
10010	Nut, macadamia, raw, unsalted	tr	tr	tr	tr	tr	0.01	tr	0.05	tr	0.46	0.01	5.62	0.02	2.24	tr	1.74	tr	0.53	tr	0.20
10005	Jack fruit, seed, mature, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.01	tr	0.14	tr	0.03	tr	0.02	tr	0.05	tr	0.01
10009	Nut, ground nut, with skin, unsalted, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	0.01	tr	4.75	0.03	1.90	tr	0.81	tr	1.60	tr	0.65
10014	Seed, sesame (sim sim) unsalted, dry, raw	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	tr	4.15	0.02	2.93	tr	0.33	tr	0.07	tr	0.05

Table 4a(iii): Fatty acids, MUFA per 100 g edible portion on fresh weight basis (EP)

Code	Food name in English	Fatty acid 14:1	Fatty acid 15:1	Fatty acid 16:1	Fatty acid 17:1	Fatty acid 18:1	Fatty acid 20:1	Fatty acid 22:1	Fatty acid 24:1
		F14D1(g)	F15D1(g)	F16D1(g)	F17D1(g)	F18D1(g)	F20D1(g)	F22D1(g)	F24D1(g)
01018	Maize, grain, white variety, whole, dry, raw	tr	tr	0.01	tr	1.30	0.01	tr	tr
01020	Maize meal, sifted, fortified, packaged, raw	tr	tr	0.01	tr	0.94	0.01	tr	tr
01023	Green Maize, white, whole, grain, fresh, raw	tr	tr	0.01	tr	0.84	0.01	tr	tr
01025	Millet, bulrush, grain, dry, raw	tr	tr	0.02	tr	1.31	0.01	tr	tr
01039	Sorghum, grain, white, dry, raw	tr	tr	0.02	tr	1.17	0.01	tr	tr
01034	Rice, white, milled, polished grain, dry, raw	tr	tr	Tr	tr	0.31	tr	tr	tr
01043	Wheat Flour (refined/fortified/sifted packaged), raw	tr	tr	Tr	tr	0.17	0.01	tr	tr
01045	Wheat, whole, grain, dry, raw	tr	tr	Tr	tr	0.34	0.02	tr	tr
03004	Beans, kidney, dry, raw	tr	tr	Tr	tr	0.17	tr	tr	
03015	Garden peas, fresh, raw	tr	tr	0.01	tr	0.15	tr	tr	tr
03017	Gram, black, dry, raw	tr	tr	Tr	tr	0.16	tr	tr	tr
05003	Avocado, ripe, raw	tr	tr	0.84	0.02	12.6	0.04	tr	tr
06022	Milk, cow, whole, fresh, raw	0.04	tr	0.05	tr	0.92	tr	tr	tr
06020	Milk, cow, whole, fermented (Lala - Industrial)	0.02	tr	0.05	tr	0.75	tr	tr	tr
06021	Milk, cow, whole, fermented (Lala - mursik)	0.03	tr	0.06	tr	1.00	tr	tr	tr
06026	Yoghurt, cow milk, whole, plain	0.02	tr	0.03	tr	0.75	tr	tr	tr
06014	Milk, camel, whole, fresh, raw	0.01	tr	0.19	tr	0.77	tr	tr	tr
07011	Egg, chicken, whole, raw	tr	tr	0.18	tr	2.72	0.02	tr	tr
07022	Sausage, beef, raw	0.04	tr	0.27	tr	6.08	0.08	tr	tr
07001	Beef, high fat, w/o bones, raw	0.18	tr	0.85	tr	8.46	0.03	tr	tr
07004	Beef, medium fat, w/o bones, raw	0.04	tr	0.24	tr	2.65	tr	0.04	tr
07002	Beef, lean, raw	tr	tr	0.07	tr	0.72	tr	tr	tr
07016	Goat, medium fat, raw	0.02	tr	0.19	tr	3.04	tr	tr	tr
07014	Goat, lean, raw	tr	tr	0.09	tr	1.59	tr	tr	tr
07009	Chicken, unespecified part, w/o bones, meat&skin, raw		tr	0.78	tr	4.90	0.05	tr	tr
07003	Beef, liver, raw	tr	tr	0.03	tr	0.57	tr	tr	tr
08010	Nile tilapia, fillet, w/o skin and bones, raw	tr	tr	0.07	tr	0.33	0.02	tr	tr

Code	Food name in English	Fatty acid 14:1	Fatty acid 15:1	Fatty acid 16:1	Fatty acid 17:1	Fatty acid 18:1	Fatty acid 20:1	Fatty acid 22:1	Fatty acid 24:1
		F14D1(g)	**F15D1(g)**	**F16D1(g)**	**F17D1(g)**	**F18D1(g)**	**F20D1(g)**	**F22D1(g)**	**F24D1(g)**
08005	Lungfish, fillet, raw	tr	tr	0.06	tr	0.17	tr	tr	tr
08009	Nile perch, fillet w/o bones, raw	tr	tr	0.04	tr	0.12	tr	tr	tr
08002	Dagaa fish (omena), dried, raw	tr	tr	1.07	tr	1.15	0.03	tr	0.04
09002	Corn oil	tr	tr	0.15	0.04	33.5	0.33	tr	tr
09012	Soya bean oil	tr	tr	0.11	0.04	24.1	0.26	tr	tr
10010	Nut, macadamia, raw, unsalted	tr	tr	16.3	0.05	37.4	1.64	0.15	tr
10005	Jack fruit, seed, mature, dry, raw	tr	tr	0.03	tr	0.09	tr	tr	tr
10009	Nut, ground nut, with skin, unsalted, dry, raw	tr	tr	0.05	0.02	22.0	0.50	0.03	tr
10014	Seed, sesame (sim sim) unsalted, dry, raw	tr	tr	0.07	0.01	18.0	0.10	tr	tr

Table 4a (iv): Fatty acids, PUFA per 100 g edible portion on fresh weights basis (EP)

Code	Food name in English	Fatty acid 16:2	Fatty acid 18:2	Fatty acid 20:2	Fatty acid 22:2	Fatty acid 18:3	Fatty acid 20:3	Fatty acid 22:3	Fatty acid 16:4	Fatty acid 18:4	Fatty acid 20:4	Fatty acid 22:4	Fatty acid 20:5	Fatty acid 22:5	Fatty acid 22:6
		F16D2 (g)	F18D2 (g)	F20D2 (g)	F22D2 (g)	F18D3 (g)	F20D3 (g)	F22D3 (g)	F16D4 (g)	F18D4 (g)	F20D4 (g)	F22D4 (g)	F20D5 (g)	F22D5 (g)	F22D6 (g)
01018	Maize, grain, white variety, whole, dry, raw	tr	1.54	tr	tr	0.04	tr	tr	tr	tr	tr	tr	tr	tr	tr
01020	Maize meal, sifted, fortified, packaged, raw		0.96	tr	tr	0.03	tr	tr	tr	tr	tr	tr	tr	tr	tr
01023	Green Maize, white, whole, grain, fresh, raw	tr	0.97	tr	tr	0.02	tr	tr	tr	tr	tr	tr	tr	tr	tr
01025	Millet, bulrush, grain, dry, raw	tr	2.00	tr	tr	0.13	tr	tr	tr	tr	tr	tr	tr	tr	tr
01039	Sorghum, grain, white, dry, raw	tr	1.26	tr	tr	0.03	tr	tr	tr	tr	tr	tr	tr	tr	tr
01034	Rice, white, milled, polished grain, dry, raw	tr	0.23	tr	tr	0.01	tr	tr	tr	tr	tr	tr	tr	tr	tr
01043	Wheat Flour (refined/fortified/sifted packaged), raw	tr	0.62	tr	tr	0.04	tr	tr	tr	tr	tr	tr	tr	tr	tr
01045	Wheat, whole, grain, dry, raw	tr	0.99	tr	tr	0.08	tr	tr	tr	tr	tr	tr	tr	tr	tr
03004	Beans, kidney, dry, raw		0.37	tr		0.79	tr								
03015	Garden peas, fresh, raw	tr	0.22	tr	tr	0.04	tr	tr	tr	tr	tr	tr	tr	tr	tr
03017	Gram, black, dry, raw	tr	0.28	tr	tr	0.49	tr	tr	tr	tr	tr	tr	tr	tr	tr
05003	Avocado, ripe, raw	tr	1.79	tr	tr	0.13	tr	tr	tr	tr	tr	tr	tr	tr	tr
06022	Milk, cow, whole, fresh, raw		0.09	tr	tr	0.02	tr	tr		0.02	tr	tr	tr	tr	tr
06020	Milk, cow, whole, fermented (Lala - Industrial)		0.07	tr	tr	0.02	tr	tr		0.02	tr	tr	tr	tr	tr
06021	Milk, cow, whole, fermented (Lala - mursik)		0.08	tr	tr	0.03	tr	tr		0.02	tr	tr	tr	tr	tr
06026	Yoghurt, cow milk, whole, plain		0.07	tr	tr	0.01	tr	tr		0.02	tr	tr	tr	tr	tr
06014	Milk, camel, whole, fresh, raw		0.09	tr	tr	0.04	tr	tr		0.01	tr	tr	tr	tr	tr
07011	Egg, chicken, whole, raw		1.43	0.02	tr	0.03	0.01	tr		tr	0.15	0.01	tr	0.04	0.09
07022	Sausage, beef, raw		2.04	0.07	tr	0.13	0.03	tr		0.03	0.04	0.01	tr	tr	tr
07001	Beef, high fat, w/o bones, raw		0.56	tr	tr	0.29	0.03	tr		0.06	0.04	tr	tr	0.03	tr
07004	Beef, medium fat, w/o bones, raw		0.17	tr	tr	0.05	0.01	tr		0.02	tr	tr	0.01	0.02	tr
07002	Beef, lean, raw		0.10	tr	tr	0.02	tr	tr		tr	0.03	tr	tr	0.02	tr
07016	Goat, medium fat, raw		0.32	tr	tr	0.08	tr	tr		0.03	0.05	tr	tr	0.03	tr
07014	Goat, lean, raw		0.19	tr	tr	0.04	tr	tr		tr	0.04	tr	tr	0.02	tr
07009	Chicken, unespecified part, w/o bones, meat&skin, raw		2.57	0.02	tr	0.15	0.03	tr		tr	0.06	0.02	tr	0.01	tr

Code	Food name in English	Fatty acid 16:2	Fatty acid 18:2	Fatty acid 20:2	Fatty acid 22:2	Fatty acid 18:3	Fatty acid 20:3	Fatty acid 22:3	Fatty acid 16:4	Fatty acid 18:4	Fatty acid 20:4	Fatty acid 22:4	Fatty acid 20:5	Fatty acid 22:5	Fatty acid 22:6
		F16D2 (g)	F18D2 (g)	F20D2 (g)	F22D2 (g)	F18D3 (g)	F20D3 (g)	F22D3 (g)	F16D4 (g)	F18D4 (g)	F20D4 (g)	F22D4 (g)	F20D5 (g)	F22D5 (g)	F22D6 (g)
07003	Beef, liver, raw		0.31	tr	tr	0.08	0.07	tr		tr	0.26	0.03	0.05	0.22	0.07
08010	Nile tilapia, fillet, w/o skin and bones, raw		0.22	0.01	tr	0.04	0.01	tr		tr	0.03	0.01	tr	0.04	0.05
08005	Lungfish, fillet, raw		0.06	tr	tr	0.03	tr	tr		tr	0.06	0.02	tr	0.03	0.08
08009	Nile perch, fillet w/o bones, raw		0.02	tr	tr	tr	tr	tr		tr	0.05	tr	0.02	0.05	0.12
08002	Dagaa fish (omena), dried, raw		0.33	0.03	tr	0.29	0.10	tr		0.04	0.30	0.04	0.68	0.39	1.33
09002	Corn oil		45.7	tr		0.75	tr			tr	tr	tr	tr	tr	tr
09012	Soya bean oil		48.8	tr		6.47	tr			tr	tr	tr	tr	tr	tr
10010	Nut, macadamia, raw, unsalted	tr	1.25	tr	tr	0.12	tr	tr	tr	tr	tr	tr	tr	tr	tr
10005	Jack fruit, seed, mature, dry, raw	tr	0.17	tr	tr	0.02	tr	tr	tr	tr	tr	tr	tr	tr	tr
10009	Nut, ground nut, with skin, unsalted, dry, raw	tr	13.9	0.01	tr	0.05	tr	tr	tr	tr	tr	tr	tr	tr	tr
10014	Seed, sesame (sim sim) unsalted, dry, raw	tr	23.6	0.01	tr	0.22	tr	tr	tr	tr	tr	tr	tr	tr	tr

Table 4b (i): Fatty acids fractions per 100 g total fatty acids (FA)

Food Code	Food name in English	Fat, total	Fatty acids, total	Fatty acids, total saturated	Fatty acids, total monounsaturated	Fatty acids, total polyunsaturated	Fatty acids, total trans	Other fatty acids, not specifiied	Sum of polyunsaturated FA, n-3	Sum of polyunsaturated FA, n-6
		FAT(g)	FACID(g)	FASAT(g)	FAMS(g)	FAPU(g)	FATRN(g)	FAUN(g)	FAPUN3(g)	FAPUN6(g)
01018	Maize, grain, white variety, whole, dry, raw	4.5	3.58	17.0	36.9	44.0	0.10	2.01	0.99	43.0
01020	Maize meal, sifted, fortified, packaged, raw	3	2.39	18.5	40.0	41.4	0.18	0	1.09	40.3
01023	Green Maize, white, whole, grain, fresh, raw	2.5	2.30	19.7	37.3	43.0	0.14	0	1.06	41.9
01025	Millet, bulrush, grain, dry, raw	5.3	4.56	23.7	29.4	46.7	0.16	0.01	2.88	43.9
01039	Sorghum, grain, white, dry, raw	3.5	3.01	19.5	40.0	43.0	0.21	0	1.12	41.9
01034	Rice, white, milled, polished grain, dry, raw	1	0.85	34.6	37.0	27.9	0.54	0	1.25	26.6
01043	Wheat Flour (refined/fortified/sifted packaged), raw	1.6	1.07	20.3	17.7	61.8	0.18	0	3.75	58.0
01045	Wheat, whole, grain, dry, raw	2.5	1.80	20.1	20.4	59.3	0.12	0.08	4.28	55.1
03004	Beans, kidney, dry, raw	2	1.60	16.1	11.0	72.5	0.43	0.02	49.1	23.4
03015	Garden peas, fresh, raw	0.7	0.56	28.2	28.4	46.7	0.79	0	7.62	39.1
03017	Gram, black, dry, raw	1.7	1.36	34.8	12.8	56.5	0.28	0	35.8	20.7
05003	Avocado, ripe, raw	19.6	18.7	17.5	72.2	10.2	0.05	0.02	0.69	9.53
06022	Milk, cow, whole, fresh, raw	3.5395	3.45	67.4	25.7	2.49	4.47	0	1.01	2.54
06020	Milk, cow, whole, fermented (Lala - Industrial)	4.0915	2.73	65.7	26.1	3.06	5.10	0	1.41	2.62
06021	Milk, cow, whole, fermented (Lala - mursik)	3.515	3.34	63.3	29.0	2.84	4.79	0	1.50	2.54
06026	Yoghurt, cow milk, whole, plain	3.0945	2.65	65.7	26.5	2.74	5.01	0.11	1.08	2.72
06014	Milk, camel, whole, fresh, raw	2.828	2.69	58.4	33.1	3.88	4.52	0.10	1.84	3.34
07011	Egg, chicken, whole, raw	8.1355	7.00	32.9	41.8	25.4	0.00	0	1.63	23.8
07022	Sausage, beef, raw	16.279	16.2	45.6	37.6	14.0	2.85	0	1.18	13.4
07001	Beef, high fat, w/o bones, raw	24.08	22.9	54.0	38.0	3.49	4.47	0.13	1.70	2.70
07004	Beef, medium fat, w/o bones, raw	7.21	6.82	52.1	40.3	3.30	4.26	0	1.47	2.71
07002	Beef, lean, raw	2.265	2.09	53.8	35.6	7.18	3.35	0	1.91	6.22
07016	Goat, medium fat, raw	8.615	8.17	53.8	36.2	5.20	4.72	0.12	1.84	4.59
07014	Goat, lean, raw	4.28	4.06	51.2	38.0	5.92	4.69	0.25	1.48	5.67
07009	Chicken, unespecified part, w/o bones, meat&skin, raw	12.98	12.3	30.1	46.3	23.2	0.41	0	1.14	22.2

Food Code	Food name in English	Fat, total	Fatty acids, total	Fatty acids, total saturated	Fatty acids, total monounsaturated	Fatty acids, total polyunsaturated	Fatty acids, total trans	Other fatty acids, not specifiied	Sum of polyunsaturated FA, n-3	Sum of polyunsaturated FA, n-6
		FAT(g)	FACID(g)	FASAT(g)	FAMS(g)	FAPU(g)	FATRN(g)	FAUN(g)	FAPUN3(g)	FAPUN6(g)
07003	Beef, liver, raw	4.2	3.11	46.1	17.0	34.4	2.52	0	13.4	21.4
08010	Nile tilapia, fillet, w/o skin and bones, raw	1.49	1.25	34.2	33.8	32.0	0	0	7.90	24.1
08005	Lungfish, fillet, raw	1.025	0.81	37.1	28.6	34.3	0	0	17.1	17.1
08009	Nile perch, fillet w/o bones, raw	0.87	0.67	34.7	25.3	40.0	0	0	26.7	13.3
08002	Dagaa fish (omena), dried, raw	10.605	9.75	39.4	23.0	35.6	1.14	0.89	27.0	9.28
09002	Corn oil	99.94245	95.5	15.8	35.5	44.5	4.21	0.02	0.39	44.1
09012	Soya bean oil	99.95	95.6	16.5	25.5	53.1	4.92	0	4.27	48.8
10010	Nut, macadamia, raw, unsalted	70.9	67.8	16.1	81.9	2.00	0.05	0	0.17	1.83
10005	Jack fruit, seed, mature, dry, raw	0.6	0.57	45.7	21.6	32.3	0.33	0.10	3.06	29.2
10009	Nut, ground nut, with skin, unsalted, dry, raw	48.4	46.3	21.1	48.8	30.0	0.06	0.02	0.11	29.9
10014	Seed, sesame (sim sim) unsalted, dry, raw	54.1	51.7	14.6	35.2	46.1	0.10	4.05	0.43	45.6

Table 4b(ii): Fatty acids, saturated per 100 g total fatty acids (FA)

Food Code	Food name in English	Fatty acid 4:0	Fatty acid 6:0	Fatty acid C7:0	Fatty acid 8:0	Fatty acid 9:0	Fatty acid 10:0	Fatty acid 11:0	Fatty acid 12:0	Fatty acid 13:0	Fatty acid 14:0	Fatty acid 15:0	Fatty acid 16:0	Fatty acid 17:0	Fatty acid 18:0	Fatty acid 19:0	Fatty acid 20:0	Fatty acid 21:0	Fatty acid 22:0	Fatty acid 23:0	Fatty acid 24:0
		F4D0 (g)	F6D0 (g)	F7D0 (g)	F8D0 (g)	F9D0 (g)	F10D0 (g)	F11D0 (g)	F12D0 (g)	F13D0 (g)	F14D0 (g)	F15D0 (g)	F16D0 (g)	F17D0 (g)	F18D0 (g)	F19D0 (g)	F20D0 (g)	F21D0 (g)	F22D0 (g)	F23D0 (g)	F24D0 (g)
01018	Maize, grain, white variety, whole, dry, raw				0.02		0.01		0.07		0.09	0.01	12.8	0.08	2.78		0.64		0.23		0.25
01020	Maize meal, sifted, fortified, packaged, raw	0.12	0.07		0.06		0.08		0.16		0.39	0.04	13.1	0.09	3.41		0.63		0.18		0.22
01023	Green Maize, white, whole, grain, fresh, raw		0.01		0.05		0.07		0.21		0.22	0.02	14.8	0.10	3.21		0.57		0.21		0.18
01025	Millet, bulrush, grain, dry, raw	0.05	0.03		0.03		0.04		0.08		0.20	0.03	17.5	0.06	4.33		0.90		0.26		0.21
01039	Sorghum, grain, white, dry, raw		0.07		0.23		0.02		0.09		0.14		16.2	0.10	2.02		0.28		0.16		0.22
01034	Rice, white, milled, polished grain, dry, raw	0.37	0.24		0.28		0.35	0.01	0.90	0.02	1.85	0.16	24.6	0.13	4.59		0.61		0.25		0.27
01043	Wheat Flour (refined/ fortified/sifted packaged), raw				0.03		0.02		0.09		0.20	0.11	17.7	0.11	1.68		0.16		0.11		0.13
01045	Wheat, whole, grain, dry, raw				0.02		0.01		0.04		0.17	0.09	17.7	0.11	1.46		0.21		0.17		0.13
03004	Beans, kidney, dry, raw				0.02		0.01		0.07		0.17	0.07	11.3	0.14	2.32		0.48		0.81		0.73
03015	Garden peas, fresh, raw	0.08	0.09		0.18		0.17		0.84		1.35	0.45	18.0	0.30	5.23		0.79		0.46		0.27
03017	Gram, black, dry, raw	0.09	0.07		0.09		0.11		0.39		0.56	0.10	22.3	0.22	5.60		1.57		2.43		1.33
05003	Avocado, ripe, raw				0.01				0.02		0.06	0.01	16.3	0.03	0.89		0.10		0.05		0.08
06022	Milk, cow, whole, fresh, raw	4.77	2.31		1.10		2.16		2.44		9.84	1.45	29.7	1.25	12.4						
06020	Milk, cow, whole, fermented (Lala - Industrial)	4.71	2.29		1.14		2.18		2.44		9.65	1.30	27.3	1.08	13.6						
06021	Milk, cow, whole, fermented (Lala - mursik)	4.49	2.10		1.20		2.10		2.24		9.13	1.50	26.0	1.20	13.3						
06026	Yoghurt, cow milk, hole, plain	4.78	2.32		1.13		2.19		2.38		9.49	1.28	27.0	1.04	14.0						

Food Code	Food name in English	Fatty acid 4:0	Fatty acid 6:0	Fatty acid C7:0	Fatty acid 8:0	Fatty acid 9:0	Fatty acid 10:0	Fatty acid 11:0	Fatty acid 12:0	Fatty acid 13:0	Fatty acid 14:0	Fatty acid 15:0	Fatty acid 16:0	Fatty acid 17:0	Fatty acid 18:0	Fatty acid 19:0	Fatty acid 20:0	Fatty acid 21:0	Fatty acid 22:0	Fatty acid 23:0	Fatty acid 24:0
		F4D0 (g)	F6D0 (g)	F7D0 (g)	F8D0 (g)	F9D0 (g)	F10D0 (g)	F11D0 (g)	F12D0 (g)	F13D0 (g)	F14D0 (g)	F15D0 (g)	F16D0 (g)	F17D0 (g)	F18D0 (g)	F19D0 (g)	F20D0 (g)	F21D0 (g)	F22D0 (g)	F23D0 (g)	F24D0 (g)
06014	Milk, camel, whole, fresh, raw								0.76		9.40	1.56	30.9	1.26	14.5						
07011	Egg, chicken, whole, raw										0.34		24.3	0.43	7.79						
07022	Sausage, beef, raw						0.07		0.13		2.18	0.28	26.4	1.02	15.3		0.26				
07001	Beef, high fat, w/o bones, raw						0.09		0.13		3.92	0.63	26.2	1.66	21.0		0.35				
07004	Beef, medium fat, w/o bones, raw										3.30	0.59	25.3	1.76	20.8		0.29				
07002	Beef, lean, raw										3.35	0.48	24.9	1.91	23.2						
07016	Goat, medium fat, raw						0.12		0.12		2.76	1.10	22.9	2.76	23.8		0.24				
07014	Goat, lean, raw										2.47	0.86	21.9	2.47	23.2		0.25				
07009	Chicken, unespecified part, w/o bones, meat&skin, raw											0.57		23.4	0.16	5.92		0.08			
07003	Beef, liver, raw										0.84	0.42	14.5	1.68	27.9					0.42	0.42
08010	Nile tilapia, fillet, w/o skin and bones, raw										3.01		23.7	0.75	6.77						
08005	Lungfish, fillet, raw										3.81		21.9	1.90	9.52						
08009	Nile perch, fillet w/o bones, raw												24.0		10.7						
08002	Dagaa fish (omena), dried, raw								0.10		4.05	0.64	24.1	2.12	7.95		0.40				
09002	Corn oil								0.04		0.05		12.1	0.08	2.52		0.57		0.20		0.23
09012	Soya bean oil								0.03		0.09		10.8	0.09	4.51		0.44		0.45		0.17
10010	Nut, macadamia, raw, unsalted						0.01		0.08		0.68	0.01	8.29	0.03	3.31		2.57		0.79		0.30
10005	Jack fruit, seed, mature, dry, raw	0.09	0.09		0.26		0.16		0.73		1.06	0.62	24.0	0.41	5.07		2.80		8.39		2.12
10009	Nut, ground nut, with skin, unsalted, dry, raw										0.03	0.01	10.3	0.06	4.10		1.76		3.46		1.41
10014	Seed, sesame (sim sim) unsalted, dry, raw												8.03	0.04	5.67		0.63		0.15		0.09

Table 4b (iii): Fatty acids, MUFA per 100 g total fatty acids (FA)

Food Code	Food name in English	Fatty acid 14:1	Fatty acid 15:1	Fatty acid 16:1	Fatty acid 17:1	Fatty acid 18:1	Fatty acid 20:1	Fatty acid 22:1	Fatty acid 24:1
		F14D1(g)	F15D1(g)	F16D1(g)	F17D1(g)	F18D1(g)	F20D1(g)	F22D1(g)	F24D1(g)
01018	Maize, grain, white variety, whole, dry, raw			0.20	0.04	36.4	0.35	0.01	0.01
01020	Maize meal, sifted, fortified, packaged, raw	0.03	0.01	0.27	0.05	39.4	0.34		0.01
01023	Green Maize, white, whole, grain, fresh, raw	0.01		0.33	0.06	36.5	0.43	0.02	0.01
01025	Millet, bulrush, grain, dry, raw	0.02		0.39	0.02	28.8	0.25		
01039	Sorghum, grain, white, dry, raw			0.66	0.06	38.9	0.36		0.03
01034	Rice, white, milled, polished grain, dry, raw	0.10	0.03	0.57	0.07	36.2	0.35	0.01	
01043	Wheat Flour (refined/fortified/sifted packaged), raw	0.01		0.36	0.07	16.3	0.85	0.13	0.10
01045	Wheat, whole, grain, dry, raw			0.24	0.07	18.8	1.06	0.12	0.10
03004	Beans, kidney, dry, raw			0.31	0.06	10.5	0.20	0.01	
03015	Garden peas, fresh, raw			1.03	0.21	26.6	0.80	0.22	
03017	Gram, black, dry, raw	0.01		0.32	0.03	12.1	0.36	0.06	0.04
05003	Avocado, ripe, raw			4.49	0.09	67.5	0.20		
06022	Milk, cow, whole, fresh, raw	1.04		1.36		26.7			
06020	Milk, cow, whole, fermented (Lala - Industrial)	0.83		1.71		27.7			
06021	Milk, cow, whole, fermented (Lala - mursik)	0.90		1.80		29.9			
06026	Yoghurt, cow milk, whole, plain	0.83		1.13		28.5			
06014	Milk, camel, whole, fresh, raw	0.50		7.04		28.8			
07011	Egg, chicken, whole, raw			2.59		38.9	0.29		
07022	Sausage, beef, raw	0.23		1.64		37.5	0.47		
07001	Beef, high fat, w/o bones, raw	0.78		3.71		36.9	0.13		
07004	Beef, medium fat, w/o bones, raw	0.59		3.59		38.9		0.66	
07002	Beef, lean, raw			3.35		34.7			
07016	Goat, medium fat, raw	0.18		2.33		37.2			
07014	Goat, lean, raw			2.22		39.2			
07009	Chicken, unespecified part, w/o bones, meat&skin, raw			6.29		39.7	0.41		
07003	Beef, liver, raw			0.84		18.2			
08010	Nile tilapia, fillet, w/o skin and bones, raw			5.63		26.7	1.50		
08005	Lungfish, fillet, raw			7.62		21.0			

Food Code	Food name in English	Fatty acid 14:1	Fatty acid 15:1	Fatty acid 16:1	Fatty acid 17:1	Fatty acid 18:1	Fatty acid 20:1	Fatty acid 22:1	Fatty acid 24:1
		F14D1(g)	F15D1(g)	F16D1(g)	F17D1(g)	F18D1(g)	F20D1(g)	F22D1(g)	F24D1(g)
08009	Nile perch, fillet w/o bones, raw			6.65		18.7			
08002	Dagaa fish (omena), dried, raw			11.0		11.8	0.30		0.40
09002	Corn oil			0.16	0.04	35.1	0.35		
09012	Soya bean oil			0.11	0.05	25.2	0.27		
10010	Nut, macadamia, raw, unsalted			24.0	0.08	55.2	2.43	0.22	
10005	Jack fruit, seed, mature, dry, raw	0.05		4.88	0.19	16.3	0.18	0.06	
10009	Nut, ground nut, with skin, unsalted, dry, raw			0.11	0.04	47.5	1.08	0.07	
10014	Seed, sesame (sim sim) unsalted, dry, raw			0.14	0.02	34.9	0.20		

Table 4b(iv): Fatty acids, PUFA per 100 g total fatty acids (FA)

Food Code	Food name in English	Fatty acid 16:2	Fatty acid 18:2	Fatty acid 20:2	Fatty acid 22:2	Fatty acid 18:3	Fatty acid 20:3	Fatty acid 22:3	Fatty acid 16:4	Fatty acid 18:4	Fatty acid 20:4	Fatty acid 22:4	Fatty acid 20:5	Fatty acid 22:5	Fatty acid 22:6
		F16D2 (g)	F18D2 (g)	F20D2 (g)	F22D2 (g)	F18D3 (g)	F20D3 (g)	F22D3 (g)	F16D4 (g)	F18D4 (g)	F20D4 (g)	F22D4 (g)	F20D5 (g)	F22D5 (g)	F22D6 (g)
01018	Maize, grain, white variety, whole, dry, raw		43.0	0.01		0.99									
01020	Maize meal, sifted, fortified, packaged, raw		40.3	0.02		1.09									
01023	Green Maize, white, whole, grain, fresh, raw		42.0	0.04		1.06									
01025	Millet, bulrush, grain, dry, raw		43.9	0.02		2.92									
01039	Sorghum, grain, white, dry, raw		42.0			1.12									
01034	Rice, white, milled, polished grain, dry, raw		26.8	0.01		1.26									
01043	Wheat Flour (refined/fortified/sifted packaged), raw		58.0	0.10		3.75									
01045	Wheat, whole, grain, dry, raw		55.1	0.10		4.28									
03004	Beans, kidney, dry, raw		23.4	0.05		49.3	0.03								
03015	Garden peas, fresh, raw		39.3	0.12		7.62									
03017	Gram, black, dry, raw		20.7	0.13		35.9									
05003	Avocado, ripe, raw		9.56			0.69									
06022	Milk, cow, whole, fresh, raw		2.54			0.45				0.57					
06020	Milk, cow, whole, fermented (Lala - Industrial)		2.62			0.72				0.70					
06021	Milk, cow, whole, fermented (Lala - mursik)		2.54			0.90				0.60					
06026	Yoghurt, cow milk, whole, plain		2.72			0.43				0.64					
06014	Milk, camel, whole, fresh, raw		3.34			1.45				0.39					
07011	Egg, chicken, whole, raw		20.4	0.28		0.36	0.19				2.21	0.21		0.54	1.27
07022	Sausage, beef, raw		12.6	0.42		0.79	0.21			0.16	0.25	0.08			
07001	Beef, high fat, w/o bones, raw		2.44			1.26	0.13			0.26	0.17			0.13	
07004	Beef, medium fat, w/o bones, raw		2.57			0.73	0.15			0.29			0.15	0.29	
07002	Beef, lean, raw		4.78			0.96					1.44			0.96	
07016	Goat, medium fat, raw		3.98			1.04				0.37	0.61			0.43	
07014	Goat, lean, raw		4.69			0.99					0.99			0.49	
07009	Chicken, unespecified part, w/o bones, meat&skin, raw		20.9	0		1.22	0.24				0.53	0.16		0.08	

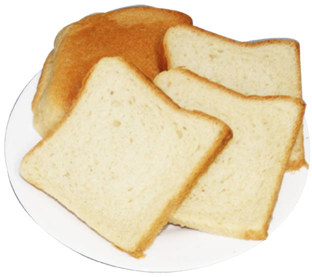
Food Code	Food name in English	Fatty acid 16:2	Fatty acid 18:2	Fatty acid 20:2	Fatty acid 22:2	Fatty acid 18:3	Fatty acid 20:3	Fatty acid 22:3	Fatty acid 16:4	Fatty acid 18:4	Fatty acid 20:4	Fatty acid 22:4	Fatty acid 20:5	Fatty acid 22:5	Fatty acid 22:6
		F16D2 (g)	F18D2 (g)	F20D2 (g)	F22D2 (g)	F18D3 (g)	F20D3 (g)	F22D3 (g)	F16D4 (g)	F18D4 (g)	F20D4 (g)	F22D4 (g)	F20D5 (g)	F22D5 (g)	F22D6 (g)
07003	Beef, liver, raw		10.1			2.52	2.10				8.39	0.84	1.68	7.13	2.10
08010	Nile tilapia, fillet, w/o skin and bones, raw		17.3	0.75		3.01	0.75				2.26	0.75		3.01	4.14
08005	Lungfish, fillet, raw		7.62			3.81					7.62	1.90		3.81	9.52
08009	Nile perch, fillet w/o bones, raw		2.67								8.00		2.67	8.00	18.7
08002	Dagaa fish (omena), dried, raw		3.36	0.30		3.01	0.99			0.44	3.11	0.40	7.01	4.00	13.6
09002	Corn oil		47.8			0.79									
09012	Soya bean oil		51.1			6.78									
10010	Nut, macadamia, raw, unsalted		1.84			0.17									
10005	Jack fruit, seed, mature, dry, raw		29.4			3.06									
10009	Nut, ground nut, with skin, unsalted, dry, raw		30.0	0.02		0.11									
10014	Seed, sesame (sim sim) unsalted, dry, raw		45.7	0.02		0.43									

FOOD PHOTOS AND THEIR DESCRIPTIONS

This section presents some of the photos of the foods described in the tables. The photos carry the common name and the code of the food. The section will make it easier for the users of the food composition tables to compare the name with the provided description of the food to confirm whether it is the same as the food they are intending to get food composition data for. Some foods may be described differently especially in food consumption surveys resulting in errors when using the information available in the tables.

Images: © FAO/Collins Ogutu & © Kenya Agricultural and Livestock Research Organization

Cereals and Cereal Products



Name: Bread, White
Code: 01007

Name: Buns, Currant
Code: 01011

Name: Cake, Fruit
Code: 01013

Name: Cake, Sponge, Homemade
Code: 01014

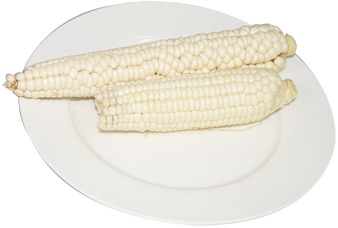
Name: Cakes, (Various fancy iced)
Code: 01016

Name: Maize, Dry
Code: 01018

Name: Maize Meal Sifed
Code: 01020

Name: Maize Degermed
Code: 01021

Name: Whole Maize Flour
Code: 01022



Name: Maize Green
Code: 01023

Name: Bulrush millet flour
Code: 01024

FINGER MILLET

Name: Finger Millet Flour
Code: 01026

Name: Rice Flour
Code: 01031

Name: Polished Rice
Code: 01033

Name: Semolina
Code: 01034

Name: Red Sorghum
Code: 010036

Name: Red Sorghum Grain Red flour
Code: 01037

Name: White Sorghum Flour
Code: 01039

Name: Wheat Flour Atta
Code: 01040

Statchy Roots, Bananas & Tubers

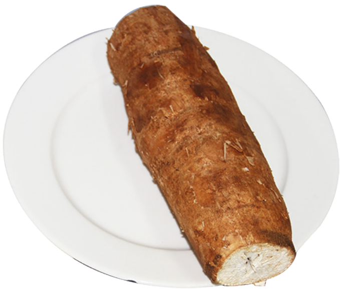
ARROW ROOTS

Name: Arrow Root Peeled
Code: 02002

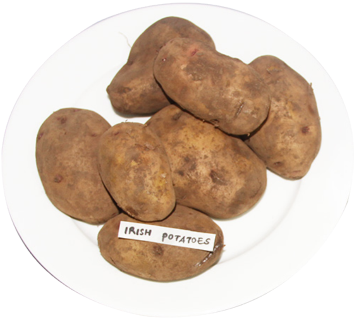
Name: Green Bananas
Code: 02003

CASSAVA FLOUR

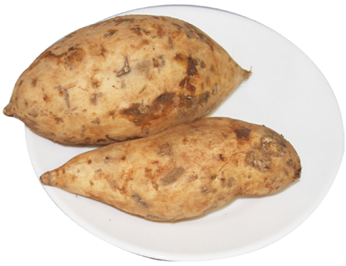
Name: Cassava Flour
Code: 02005



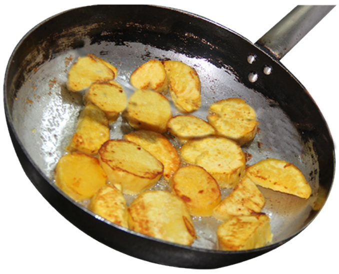
Name: Cassava White Peeled
Code: 02006



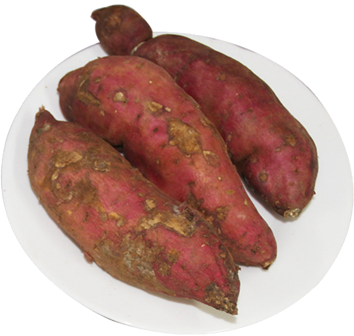
Name: Irish Potato
Code: 02008



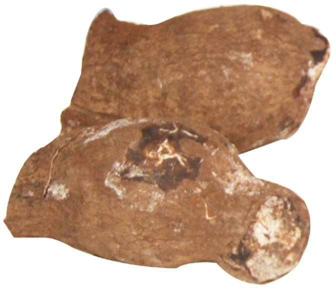
Name: Sweet Potatoes Brown Skin
Code: 02012



Name: Sweet Potato, Orange, Biofortified
Code: 02013 (2)

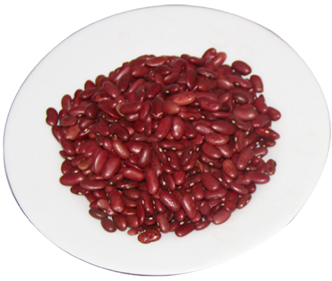


Name: Sweet Potato Pink Skin
Code: 02014

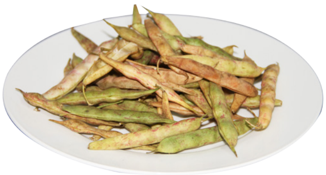


Name: Yam White Raw
Code: 02018

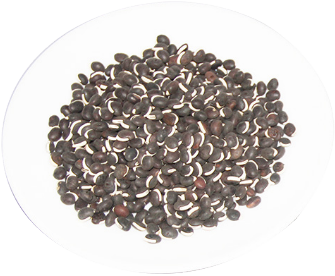
Legumes & Pulses



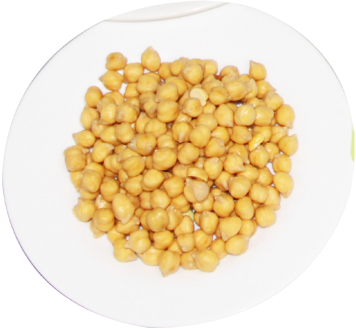
Name: Dry Kidney Beans
Code: 03004



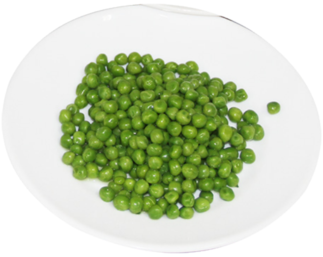
Name: Fresh Kidney Beans
Code: 03006



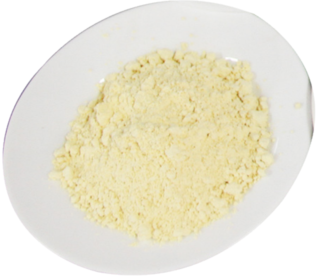
Name: Black Bean
Code: 03008



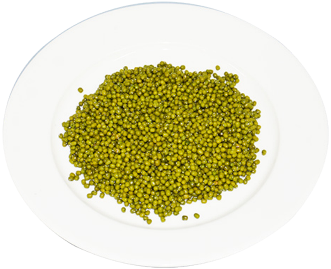
Name: Chickpeas Dry
Code: 03010



Name: Garden Peas Fresh
Code: 03015



Name: Gram Flour
Code: 03018



Name: Green Grams Dry
Code: 03019

Name: Legumes Dry
Code: 03020

Name: Lentils
Code: 03020

Name: Pigeon Peas Dry
Code: 03021

Vegetables & Vegetable Products

Name: Amaranth Leaves
Code: 04001

Name: African Nightshade
Code: 04003

Name: Cabbage White Leafhead
Code: 04007

Name: Carrot
Code: 04011

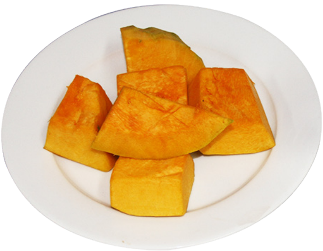
Name: Cowpea Leaves
Code: 04015

Name: Jute Mallow Leaves
Code: 04018

Name: Ethiopian Kale
Code: 04019

Name: Kale (Sukumawiki)
Code: 04020

Name: Mushroom Raw
Code: 04023



Name: Pumpkin Flesh
Code: 04027

Name: Pumpkin Leaves
Code: 04028

Name: Spider Plant Leaves
Code: 04029

Name: Spinach
Code: 04031

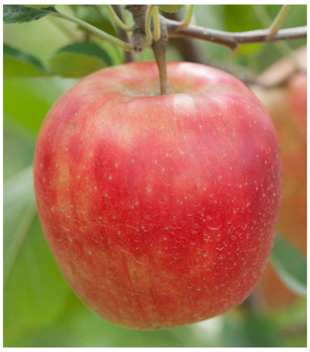
Name: Stinging Nettle
Code: 04033

Name: Tomato Green Raw
Code: 04034

Name: Tomato Ripe
Code: 04035

Name: African Vine Spinach
Code: 04037

Fruits



Name: Red Apple
Code: 05002

Name: Avocado Ripe
Code: 05003

Name: Guava, Pink-Fleshed 1, Raw
Code: 05011

Name: Guava, Pink-Fleshed, Raw
Code: 05011

Name: Lemon Peel
Code: 05014

Name: Lemon, Pulp, Raw
Code: 05014

Name: Loquat, Peeled, Raw-
Code: 05017

Name: Mango Unripe
Code: 05019

Name: Orange, Pulp, Raw
Code: 05022

Name: Papaya, Yellow Skin
Code: 05023

Name: Pineapple Raw
Code: 05029

Name: Tangerine Pulp
Code: 05035

Name: Tree Tomato, Dark Red
Code: 05036

Name: Watermelon Green White Stripes
Code: 05037

Name: Zambarau
Code: 05039

Milk & Dairy Products

Name: Cow Milk Butter Salted
Code: 06002

Name: Cow Milk Butter Unsalted
Code: 06002

Name: Ghee (Cow Milk)
Code: 06008

Name: Camel Milk
Code: 06014

Name: Milk Cow Skimmed
Code: 06019

Name: Milk Cow Whole Fresh
Code: 06022

Name: Milk Cow, Skimmed Sweetened
Code: 06015

Name: Milk, Cow, Codensed, Whole
Code: 06016

Name: Milk Goat Fluid Whole
Code: 06023

Name: Milk Sheep Fluid Whole
Code: 06025

Name: Yoghurt (Cow Milk) In White Bowl
Code: 06026

Meat & Poultry

Name: Beef, High Fat
Code: 07001

Name: Beef Lean
Code: 07002

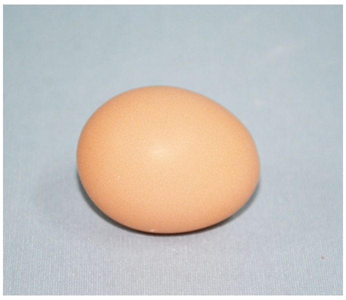
Name: Beef Medium Fat Without Bones
Code: 07004

Name: Camel Blood
Code: 07005

Name: Camel Meat Red
Code: 07006

Name: Cow's Blood
Code: 07007

Name: Chicken
Code: 07009



Name: Chicken Egg Whole
Code: 07011

Name: Goat blood
Code: 07013

Name: Goat Meat Medium Fat
Code: 07016

Name: Guinea Fowl Meal
Code: 07017

Name: Quail
Code: 07026

Fish and Sea Foods

Name: Dagaa Fish
Code: 08002

Name: Merkerel (King Fish)
Code: 08007

Name: Nile Perch
Code: 08009

Name: Nile Tilapia Fillet
Code: 08010

Fats and oils

Name: Animal Fat
Code: 09001

Name: Corn Oil
Code: 09002

Name: Shortening (Cooking Fat)
Code: 09011

Name: Margarine

Nuts & Seeds

Name: Coconut Fresh Mature
Code: 10002

Name: Almond Nuts
Code: 10007

Name: Mustard Seeds
Code: 10006

Name: Groundnut With Skin
Code: 10009

PISTACHIOS

Name: Pistachio Nuts
Code: 10011

Name: Peanut Butter

Sugar & Sweetened Products

Beaverages

Name: Water Tap
Code: 12005

Condiments & Spices

BAKING POWDER

Name: Baking Powder
Code: 13002

Name: Bay Leaves
Code: 13004

GREEN CHILLI

Name: Chillis Fresh
Code: 13006

Name: Cinnamon
Code: 13008

Name: Cloves
Code: 13009

Name: Coconut Milk
Code: 13010

Name: Coriander Leaves Fresh
Code: 13011

Name: Coriander Powder
Code: 13012

Name: Curry Leaves
Code: 13014

Name: Fenugreek Leaves
Code: 13016

Name: Fenugreek Seeds
Code: 13017

Name: Garam Masala
Code: 13018

Name: Garlic Fresh
Code: 13019

Name: Green Ginger Fresh
Code: 13021

Name: Mint Leaves
Code: 13022

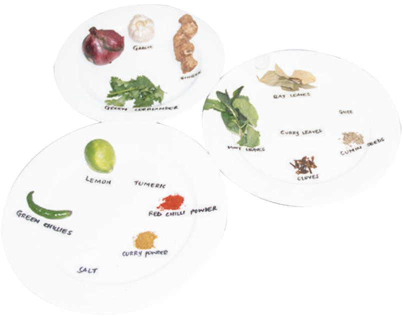
Name: Onion
Code: 13023

Name: Salt
Code: 13026

Name: Tomato Paste
Code: 13031

Name: Ground Turmeic
Code: 13033

Name: Yeast
Code: 13034


GARLIC
GINGER
GREEN CORRIANDER
BAY LEAVES
GHEE
CURRY LEAVES
MINT LEAVES
CUMIN SEEDS
CLOVES
LEMON
TUMERIC
GREEN CHILLIES
RED CHILLI POWDER
CURRY POWDER
SALT

Name: Spices

BIBLIOGRAPHY

1. AUSNUT. (2011-13). AHS Food Nutrient Database.xlsx http://www.foodstandards.gov.au/science/monitoringnutrients/ausnut/ausnutdatafiles/Pages/foodnutrient.aspx
2. Central Research Institute of Food and Feed Contro, Bursa, Turkey (2015). Biodiversity for Food and Nutrition Project.
3. Chemical Composition of Some Kenya Foodstuffs D Harvey Records of the Medical Research Laboratory No 10, Medical Department Government Printer, Nairobi, 1951 (English).
4. FAO (2016). FAO/INFOODS Food Composition Database for Biodiversity Version 3.0–BioFoodComp3.0. FAO, Rome.
5. FAO (2016). FAO/INFOODS Analytical Food Composition Database Version 1.1 – AnFooD1.1. Rome, Italy.
6. 6. FAO (2017). FAO/INFOODS Global Food Composition Database for Pulses Version 1.0 - uPulses 1.0. Rome, FAO.
7. FAO (2016). FAO/INFOODS Global Food Composition Database for Fish and Shellfish Version 1.0-uFiSh1.0. Rome, Italy.

8. FAO/INFOODS. (2011). INFOODS Compilation Tool Version 1.2.1
9. FAO/INFOODS. 2012. West African Food Composition Table. Rome, FAO. Retrieved from http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases/en/
10. FAO/INFOODS. (2012a). Guidelines for Checking Food Composition Data prior to Publication of a User Table/Database Version 1.0

11. FAO/INFOODS. (2012b). Guidelines for Converting Units, Denominators and Expressions Version 1.0

12. FAO/INFOODS. (2012c). Guidelines for Food Matching Version 1.2

13. FAO/INFOODS. (2013). FAO/INFOODS e-Learning Course on Food Composition Data. Rome: FAO. Retrieved from http://www.fao.org/elearning/#/elc/en/Course/FCDFAO/INFOODS. (2014). INFOODS food component identifiers, called tagnames

14. Kinyuru J.N., Kenji G.M., Muhoho S.N., Ayieko M. (2010) Effect of Processing Methods on the In Vitro protein Digestibility and vitamin Content of Edible Winged Termite (Macrotermes subhylanus) and Grasshopper (Ruspolia differens). Food Bioprocess Technol (2010) 3:778-782 DOI 10,1007/s 11947-009-0264-1.
15. 15. Klensin. J. C., Feskanich. D., Lin. V., Truswell. A. S., Southgate. D. A. T. (1989). Identification of Food Components for INFOODS Data Interchange. United Nations University Press, Japan. Retrieved from http://www.fao.org/uploads/media/Klensin_et_al_1989_Identification_of_food_components_for_I%E2%80%A6_02.pdf
16. 16. Lokuruka M.N.I. (2007). Amino Acid and some minerals in the Nut of the Turkana Douma Palm (Hyhaenecoriacea). AJFAND volume No.2 2007.
17. 17. Longvah T., Ananthan R., Bhaskarachary K., & Venkaiah K. (2017). Indian Food Composition Tables 2017. National Institute of Nutrition. Indian Council of Medical Research. Department of Health Research. Ministery of Health and Family Welfare, Government of India. Hyderabad.
18. 18. Mary K. Walingo and Florence O Habwe (2011). Using Food Grade Lye "omushelekha" in the Formation of Health Products from Commonly Consumed African Indigenous Vegetable Combinations.

Fonctional Foods in Heals and Disease 2011;5:189-197.

19. 19. Mercy K. Kobia (2002). (A02-0643/99) A Comparison of Cooking and Processing Characteristic of two types of Arroroots (Colocasiaesculenta) Growth in Meru, Kenya.2002
20. 20. Michael Ilukwol N. Lokuruka (2003). Scombrotoxin Formation in Atlantic Mackerel (ScomberScombrus) and other Fish Under Commercial Handling Conditions and some Abuse Conditions. A dissertation presented to the faculty of the Graduate School of Cornell University in partiall fulfillment of the requirements for the Degree of Doctor of Philosophy.
21. Michaelsen, K. F., Hoppe, C., Roos, N., Kaestel, P., Stougaard, M., Lauritzen, L., & Friis, H. (2009). Choice of foods and ingredients for moderately malnourished children 6 months to 5 years of age. Food and nutrition bulletin, 30(3 suppl3), S343-S404.
22. Sehmi, J. K., (1993). National Food Composition Tables and The Planning of Satisfactory Diets in Kenya.. Government Printer, Nairobi, Kenya.
23. USDA_SR28 comprehensive file.xlsx https://ndb.nal.usda.gov/ndb/
24. Vásquez-Caicedo, A. L., Bell, S., & Hartmann, B. (2008). Report on collection of rules on use of recipe calculation procedures including the use of yield and retention factors for imputing nutrient values for composite foods. EuroFIR Technical Report (D2.2.9). Retrieved from http://www.eurofir.org/report-on-collection-of-rules-on-use-of-recipe-calculation-procedures-including-the-use-of-yield-and-retention-factors-for-imputing-nutrient-values-for-composite-foods/

BiblioID in alphabetical order

2E	Mitchikpe, E., Dossa, R., Ategbo, E. A., Van Raaj, J. M. A., Hulshof, P. J. M., Kok, F. J. (2008). The supply of bioavailable iron and zinc may be affected by phytate in Beninese children. Journal of food composition and analysis 21, 17-25. (http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WJH-4P59X64-2&_user=10&_coverDate=02%2F29%2F2008&_rdoc=1&_fmt=high&_orig=search&_sort=d&_docanchor=&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=f3a4d818fceaf77a97d3b82c560b465e)
AU14	Australian Food, Supplement and Nutrient Database (AUSNUT) 2011-2013. Retrieved from: http://www.foodstandards.gov.au/science/monitoringnutrients/ausnut/pages/default.aspx
BR94	Rujillo-Quijano, J. A. (1994). Aproveitamento integral do óleo de palma (Elaeis guineensis, Jacq.). [tese]. Campinas: Faculdade de Engenharia de Alimentos, Universidade Estadual de Campinas.
CH02	Institute of Nutrition and Food Safety. (2002). China Food Composition China 1 (2nd ed.). Peking University Medical press. Beijing, China.
dp10	Wehmeyer A.S. (1986) Edible wild plants of southern Africa. http://researchspace.csir.co.za/dspace/bitstream/10204/2337/1/Vehmeyer_1986.pdf
dp14	Lamperi, L., Chiuminatto, U., Cincinelli, A., Galvan, P., Giordani, E., Lepri, L., Del Bubba, M. (2008) Polyphenol levels and free radical scavenging activities of four apple cultivars from integrated and organic farming in different Italian areas. Journal of Agricultural and Food Chemistry 56 (15), pp. 6536-6546
fi126	Rebah F.B., Abdelmouleh A., Kammoun W., Yezza A. (2010). Seasonal variation of lipid content and fatty acid composition of Sardinella aurita from Tunisian coast. Journal of the Marine Biological Association of the United Kingdom 90(3): 569-573
fi139	Steiner-Asiedu M., Julshamn K., Lie Ø. (1991). Effect of local processing methods (cooking, frying and smoking) on three fish species from Ghana: Part I. Proximate composition, fatty acids, minerals, trace elements and vitamins. Food Chemistry 40:309-321
i30	Agbigye F.S., Ofuya T.I., Akindele S.O. (2009) Marketability and nutritional qualities of some edible forest insects in Benue State, Nigeria. Pakistan Journal of Nutrition 8 (7): 917-922
i36	Ekpo K.E. (2011) Nutritional and biochemical evaluation of the protein quality of four popular insects consumed in Southern Nigeria. Archives of applied science research, 3 (5): 428-444
i46	Kinyuru J.N., Kenji G.M., Muhoho S.N., Ayieko M. (2010) Effect of Processing Methods on the In Vitro protein Digestibility and vitamin Content of Edible Winged Termite (Macrotermes subhylanus) and Grasshopper (Ruspolia differens). Food Bioprocess Technol 3: 778-782
i47	Kinyuru J.N., Kenji G.M., Muhoho S.N., Ayieko M. (2010) Nutritional Potential of Longhorn Grasshopper (Ruspolia differens) Consumed in Siaya district Kenya. Journal of Agriculture, Science and Technology p.32-46
i56	Phelps R.J., Struthers J.K., Moyo S.J. (1975) Investigations into the Nutritive Value of Macrotermes falciger (Isoptera: Termitidae). Zoologica Africana 10(2):123-132
i64	Igwe, C.U., Ujowundu C.O., Nwaogu L.A., Okwu, G.N. (2011). Chemical Analysis of an Edible African Termite, Macrotermes nigeriensis; a Potential Antidote to Food Security Problem. Biochem & Anal Biochem 1(1)
IN17	Longvah T., Ananthan R., Bhaskarachary K., & Venkaiah K. (2017). Indian Food Composition Tables 2017. National Institute of Nutrition. Indian Council of Medical Research. Department of Health Research. Ministery of Health and Family Welfare, Government of India. Hyderabad.

k001	Lokuruka M.N.I. (2007). Amino Acid and some minerals in the Nut of the Turkana Douma Palm (Hyhaenecoriacea). AJFAND volume No.2.
k011	Michael Ilukwol N. Lokuruka (2003). Scombrotoxin Formation in Atlantic Mackerel (ScomberScombrus) and other Fish Under Commercial Handling Conditions and some Abuse Conditions. A dissertation presented to the faculty of the Graduate School of Cornell University in partiall fulfillment of the requirements for the Degree of Doctor of Philosophy.
k017	Kinyuru J.N., Kenji G.M., Muhoho S.N., Ayieko M. (2010) Effect of Processing Methods on the In Vitro protein Digestibility and vitamin Content of Edible Winged Termite (Macrotermes subhylanus) and Grasshopper (Ruspolia differens). Food Bioprocess Technol (2010) 3:778-782 DOI 10,1007/s 11947-009-0264-1
K006	Mercy K. Kobia (2002). (A02-0643/99) A Comparison of Cooking and Processing Characteristic of two types of Arroroots (Colocasiaesculenta) Growth in Meru, Kenya
K030	Mary K. Walingo and Florence O Habwe(2011). Using Food Grade Lye "omushelekha" in the Formation of Health Products from Commonly Consumed African Indigenous Vegetable Combinations.Fonctional Foods in Heals and Disease 2011;5:189-197.
k032	Central Research Institute of Food and Feed Contro,Bursa , Turkey (2015). Biodiversity for Food and Nutrition Project.
KEN93	Sehmi, J. K., (1993). National Food Composition Tables and The Planning of Satisfactory Diets in Kenya. Government Printer, Nairobi, Kenya.
SGS	GoK/FAO. 2017. Kenya Food analytical program data.
UF1	FAO. 2016. FAO/INFOODS Global food composition database for fish and shellfish – version 1.0 (uFiSh1.0). Rome, FAO. Retrieved form http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases/en/
UK7	Public Health England (2015) McCance and Widdowson's The Composition of Foods Integrated Dataset (CoFID) 2015. Prepared by Finglas P., Roe M., Pinchen H., Berry R., Church S., Dodhia S., Powell N., Farron-Wilson M., McCardle J., & Swan G, Institute of Food Research. Public Health England, London. Retrieved from https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid. Open Government Licence https://www.nationalarchives.gov.uk/doc/open-government-licence/version/2/
UP1	FAO. 2017. FAO/INFOODS Global Food Composition Database for Pulses Version 1.0 - uPulses 1.0. Rome, FAO. Retrieved form http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases/en/
US28	U.S. Department of Agriculture, (2015). USDA National Nutrient Database for Standard Reference, Release 28. U.S. Department for Agriculture, Agricultural Research Service, Nutrient Data Laboratory. Retrieved from http://ndb.nal.usda.gov/.
ve7	Sreeramulu, G., Ndossi, D, G., Mtotomwema. Effect of cooking on the nutritive value of common food plants of Tanzania: Part 1 - vitamin C in some of the Wild Green leafy vegetables (1983) Food chemistry 10, pp 205-210
ve8	Oboh G. Effect of blanching on the antioxidant properties of some tropical green leafy vegetables (2005) Swiss society of food science and technology 38, pp 513-517
ve26	Schonfeldt, C, H., Pretorius, B. The nutrient content of five traditional South African dark green leafy vegetables - A preliminary study (2011) Journal of food composition and analysis, pp 1-6
WA12	FAO. 2012. West African Food Composition Tables, Rome, FAO.
ZA10	Wolmarans P., Danster N., Dalton A., Rossouw K., Schönfeldt H. (eds). (2010). Condensed Food Composition Tables for South Africa. Medical Research Council, Parow Valley, Cape Town.

ANNEXES

ANNEX 1. List of yield factors

Code	Food description	Yield Factor	Source
GROUP A -	**CEREALS AND CEREAL PRODUCTS**		
01047	Maize, grain,white variety, whole, dry, boiled, drained (without salt)	3.10	Own measurement (maize, yellow, grain, dry, boiled, drained)
01048	Maize, grain, white variety, whole, dry, boiled in recipe (without salt)	3.10	Own measurement (maize, yellow, grain, dry, boiled)
01049	Maize, grain, yellow variety, whole, dry, boiled, drained (without salt)	3.10	Own measurement (maize, yellow, grain, dry, boiled, drained)
01050	Maize, grain, yellow variety, whole, dry, boiled (without salt, water included)	4.30	Own measurement (maize, yellow, grain, dry, boiled)
01051	Green Maize, white, whole, grain, fresh, boiled, drained (without salt)	1.07	Own measurement (green maize, fresh, grain, boiled, drained)
01052	Green Maize, white, whole, grain, fresh, stewed (without salt)	0.77	Own measurement (green maize, fresh, grain, stewed)
01053	Millet, bulrush, grain, dry, boiled, drained (without salt)	2.40	Bognár, 2002 (millet (shacked corn), boiled)
01054	Millet, bulrush, grain, dry, stewed (without salt)	2.40	Bognár, 2002 (millet (shacked corn), stewed)
01055	Sorghum, grain, white, dry, boiled, drained (without salt)	2.40	Bognár, 2002 (millet (shacked corn), boiled)
01056	Sorghum, grain, white, dry, stewed (without salt)	2.40	Bognár, 2002 (millet (shacked corn), stewed)
01057	Sorghum, grain, red, dry, boiled, drained (without salt)	2.40	Bognár, 2002 (millet (shacked corn), boiled)
01058	Sorghum, grain, red, dry, stewed (without salt)	2.40	Bognár, 2002 (millet (shacked corn), stewed)
01059	Rice, white, milled, polished grain, dry, boiled (without salt)	2.98	Bognár, 2002 (rice, long corn, polished, boiled)
01060	Rice, parboiled, boiled (without salt)	2.90	Bergström, 1994 (rice, parboiled, boiled)
01061	Wheat, whole, grain, dry, boiled, drained (without salt)	1.78	Bognár, 2002 (wheat, whole, boiled / stewed)
01062	Wheat, whole, grain, dry, stewed (without salt)	1.78	Bognár, 2002 (wheat, whole, boiled / stewed)
01046	Amaranth, whole, grain, dry, stewed (without salt)	2.98	Bognár, 2002 (Amaranth,stewed)
01063	Pasta, spaghetti, dry, imported, boiled, drained (without salt)	2.90	Bergström, 1994 (spaghetti, boiled)
01064	Pasta, spaghetti, dry, imported, boiled in recipe (without salt)	2.90	Bergström, 1994 (spaghetti, boiled)
01065	Pasta, macaroni, plain, dry, imported, boiled, drained (without salt)	2.46	Bognár, 2002 (small pasta, wheat flour with egg, boiled)
01066	Pasta, macaroni, plain, dry, imported, boiled in recipe (without salt)	2.46	Bognár, 2002 (small pasta, wheat flour with egg, boiled)
GROUP B -	**STARCHY ROOTS BANANAS AND TUBERS**		
02020	Arrowroot, peeled, boiled, drained (without salt)	1.00	Bognár, 2002 (Potato, without peel, boiled)
02021	Beet root, peeled, boiled, drained (without salt)	0.99	Bergström, 1994 (beetroot, boiled)
02022	Beet root, peeled, stewed (without salt)	1.06	Bognár, 2002 (beetroot, without skin, stewed)
02023	Cassava, root, white, peeled, boiled, drained (without salt)	1.17	Own measurement (cassava, root, white, peeled, boiled with pressure, drained)
02024	Cassava, root, yellow, peeled, boiled, drained (without salt)	1.17	Own measurement (cassava, root, white, peeled, boiled with pressure, drained)

Code	Food description	Yield Factor	Source
02025	Potato, Irish (English), white variety, peeled, boiled, drained (without salt)	1.00	Bognár, 2002 (Potato, without peel, boiled)
02026	Potato, Irish (English), white variety, peeled, steamed (without salt)	0.98	Bognár, 2002 (Potato, without peel, steamed)
02027	Sweet potato, brown skin, peeled, boiled, drained (without salt)	1.00	Bognár, 2002 (Potato, without peel, boiled)
02028	Sweetpotato, orange, biofortified, boiled, drained (without salt)	1.00	Bognár, 2002 (Potato, without peel, boiled)
02029	Sweet potato, pink skin, boiled, drained (without salt)	1.00	Bognár, 2002 (Potato, without peel, boiled)
02030	Yam, white, boiled, drained (without salt)	0.95	Bognár, 2002 (Root and tuber vegetables, boiled)
GROUP C - LEGUMES			
03023	Beans, broad, dry, unsoaked, boiled, drained (without salt)	2.80	USDA, 2015 (broadbean, cooked)
03024	Beans, broad, dry, unsoaked, boiled (without salt, water not discarded)	4.60	uPulses, 2017 (VIF004)
03025	Beans, broad, dry, water-soaked, boiled in different water, drained (without salt)	2.80	USDA, 2015 (broadbean, cooked)
03026	Beans, broad, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.60	uPulses, 2017 (VIF004)
03027	Beans, broad, fresh, boiled, drained (without salt)	0.95	Matthews, 1975 (pea, green, immature, shelled, boiled)
03028	Beans, cluster, fresh, boiled, drained (without salt)	0.95	Matthews, 1975 (pea, green, immature, shelled, boiled)
03029	Beans, kidney, dry, unsoaked, boiled, drained (without salt)	2.61	Holland et al, 1991 (kidney beans dried, soaked and boiled)
03030	Beans, kidney, dry, unsoaked, boiled (without salt, water not discarded)	4.33	uPulses, 2017 (PHV016)
03031	Beans, kidney, dry, water-soaked, boiled in different water, drained (without salt)	2.61	Holland et al, 1991 (kidney beans dried, soaked and boiled)
03032	Beans, kidney, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.33	uPulses, 2017 (PHV016)
03033	Beans, lima, dry, unsoaked, boiled, drained (without salt)	2.50	Holland et al, 1991 (butter beans, soaked and boiled)
03034	Beans, lima, dry, unsoaked, boiled (without salt, water not discarded)	4.33	uPulses, 2017 (PHL003)
03035	Beans, lima, dry, water-soaked, boiled in different water, drained (without salt)	2.50	Holland et al, 1991 (butter beans, soaked and boiled)
03036	Beans, lima, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.33	uPulses, 2017 (PHL003)
03037	Bonavist, dry, unsoaked, boiled, drained (without salt)	2.61	uPulses (LAP002)
03038	Bonavist, dry, unsoaked, boiled (without salt, water not discarded)	4.13	uPulses (LAP003)
03039	Bonavist, dry, water-soaked, boiled in different water, drained (without salt)	2.61	uPulses (LAP002)
03040	Bonavist, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.13	uPulses (LAP003)
03041	Chick peas, whole, dry, unsoaked, boiled, drained (without salt)	2.25	uPulses, 2017 (CIA007)
03042	Chick peas, whole, unsoaked, boiled (without salt, water not discarded)	3.15	uPulses, 2017 (CIA008)
03043	Chick peas, whole, dry, water-soaked, boiled in different water, drained (without salt)	2.25	uPulses, 2017 (CIA007)
03044	Chick peas, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	3.15	uPulses, 2017 (CIA008)
03045	Cowpeas, dry, unsoaked, boiled, drained (without salt)	2.67	uPulses, 2017 (VUN005)

Code	Food description	Yield Factor	Source
03046	Cowpeas, unsoaked, boiled (without salt, water not discarded)	4.42	uPulses, 2017 (VUN006)
03047	Cowpeas, dry, water-soaked, boiled in different water, drained (without salt)	2.67	uPulses, 2017 (VUN005)
03048	Cowpeas, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.42	uPulses, 2017 (VUN006)
03049	Cowpeas, fresh, boiled, drained (without salt)	0.95	Matthews, 1975 (pea, green, immature, shelled, boiled)
03050	Garden peas, fresh, boiled, drained (without salt)	0.95	Matthews, 1975 (pea, green, immature, shelled, boiled)
03051	Garden peas, dry, unsoaked, boiled, drained (without salt)	2.70	Holland et al, 1991 (peas, whole, soaked and boiled)
03052	Garden peas, unsoaked, boiled (without salt, water not discarded)	4.25	uPulses, 2017 (PIS012)
03053	Garden peas, dry, water-soaked, boiled in different water, drained (without salt)	2.70	Holland et al, 1991 (peas, whole, soaked and boiled)
03054	Garden peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.25	uPulses, 2017 (PIS012)
03055	Gram, black, dry, unsoaked, boiled, drained (without salt)	3.08	Holland et al, 1991 (black gram, whole, soaked and boiled)
03056	Gram, black, unsoaked, boiled (without salt, water not discarded)	4.60	uPulses, 2017 (PIS012)
03057	Gram, black, dry, water-soaked, boiled in different water, drained (without salt)	3.08	Holland et al, 1991 (black gram, whole, soaked and boiled)
03058	Gram, black, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.60	uPulses, 2017 (PIS012)
03059	Gram, green, dry, unsoaked, boiled, drained (without salt)	2.69	uPulses, 2017 (VIR004)
03060	Gram, green, unsoaked, boiled (without salt, water not discarded)	4.25	uPulses, 2017 (VIR005)
03061	Gram, green, dry, water-soaked, boiled in different water, drained (without salt)	2.69	uPulses, 2017 (VIR004)
03062	Gram, green, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.25	uPulses, 2017 (VIR005)
03063	Lentils, whole, dry, unsoaked, boiled, drained (without salt)	2.65	uPulses, 2017 (LEC009)
03064	Lentils, whole, unsoaked, boiled (without salt, water not discarded)	4.25	uPulses, 2017 (LEC010)
03065	Lentils, whole, dry, water-soaked, boiled in different water, drained (without salt)	2.65	uPulses, 2017 (LEC009)
03066	Lentils, whole, dry, water-soaked, boiled in different water (without salt, water not discarded)	4.25	uPulses, 2017 (LEC010)
03067	Pigeon peas, dry, unsoaked, boiled, drained (without salt)	2.30	uPulses, 2017 (CAC004)
03068	Pigeon peas, unsoaked, boiled (without salt, water not discarded)	3.20	uPulses, 2017 (CAC005)
03069	Pigeon peas, dry, water-soaked, boiled in different water, drained (without salt)	2.30	uPulses, 2017 (CAC004)
03070	Pigeon peas, dry, water-soaked, boiled in different water (without salt, water not discarded)	3.20	uPulses, 2017 (CAC005)
03071	Soybean, dry, unsoaked, boiled, drained (without salt)	2.43	Bergström, 1994 (soyabeans, dried)
03072	Soybean, dry, water-soaked, boiled in different water, drained (without salt)	2.43	Bergström, 1994 (soyabeans, dried)
GROUP D - VEGETABLES			
04039	Amaranth, leaves, picked, boiled, drained (without salt)	0.95	Bognár, 2002 (spinach, boiled)
04040	Amaranth, leaves, picked, stewed (without salt)	0.81	Bognár, 2002 (spinach, stew)
04041	Bitter gourd, whole, different varieties, boiled, drained (without salt)	0.90	Bergström, 1994 (courgettes, squash, summer, boiled)

Code	Food description	Yield Factor	Source
04042	Black (African) nightshade, indigenous, leaves, picked, boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04043			
04044	Broccoli, tops and stems, boiled, drained (without salt)	1.11	Bognár, 2002 (broccoli, boiled)
04045	Broccoli, tops and stems, steamed (without salt)	1.04	Bognár, 2002 (broccoli, steamed)
04046	Cabbage, leaf head, Chinese, boiled, drained (without salt)	0.98	Bognár, 2002 (white cabbage, boiled)
04047	Cabbage, leaf head, Chinese, steamed (without salt)	0.98	Matthews, 1975 (cabbage, chinese, steamed)
04048	Cabbage, leaf head, red, boiled, drained (without salt)	0.98	Bognár, 2002 (red cabbage, boiled)
04049	Cabbage, leaf head, red, stewed (without salt)	1.08	Bognár, 2002 (red cabbage, stew)
04050	Cabbage, leaf head, white, boiled, drained (without salt)	0.98	Bognár, 2002 (white cabbage, boiled)
04051	Cabbage, leaf head, white, stewed (without salt)	0.93	Bognár, 2002 (white cabbage, stewed)
04052	Capsicum (sweet peper), green, boiled, drained (without salt)	0.87	Bergström, 1994 (peppers, capsicum, boiled)
04053	Capsicum (sweet peper), green, grilled (without salt and fat)	0.93	Bergström, 1994 (peppers, capsicum, grilled)
04054	Capsicum (sweet peper), green, baked (without salt)	0.96	Bergström, 1994 (peppers, capsicum, baked)
04055	Capsicum (sweet peper), red, boiled, drained (without salt)	0.87	Bergström, 1994 (peppers, capsicum, boiled)
04056	Capsicum (sweet peper), red, grilled (without salt and fat)	0.93	Bergström, 1994 (peppers, capsicum, grilled)
04057	Capsicum (sweet peper), red, baked (without salt)	0.96	Bergström, 1994 (peppers, capsicum, baked)
04058	Capsicum (sweet peper), yellow, boiled, drained (without salt)	0.87	Bergström, 1994 (peppers, capsicum, boiled)
04059	Capsicum (sweet peper), yellow, grilled (without salt and fat)	0.93	Bergström, 1994 (peppers, capsicum, grilled)
04060	Capsicum (sweet peper), yellow, baked (without salt)	0.96	Bergström, 1994 (peppers, capsicum, baked)
04061	Carrot, peeled, boiled, drained (without salt)	0.94	Bognár, 2002 (carrot, boiled)
04062	Carrot, peeled, stewed (without salt)	0.96	Bognár, 2002 (carrot, stewed)
04063	Cauliflower, tops and stems, boiled, drained (without salt)	1.00	Bognár, 2002 (cauliflower, boiled)
04064	Celery, stalk, boiled, drained (without salt)	0.90	Bognár, 2002 (celery, boiled)
04065	Courgette, green, unpeeled, boiled, drained (without salt)	0.90	Bergström, 1994 (courgettes, squash, summer, boiled)
04066	Cowpea, leaves, picked, boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04067	Cowpea, leaves, picked, steamed (without salt)	1.15	Matthews, 1975 (kale, steamed)
04068	Eggplant / Brinjal, different varieties, whole edible, boiled, drained (without salt)	0.93	Bergström, 1994 (aubergine, boiled)
04069	Eggplant / Brinjal, different varieties, whole edible, stewed (without salt)	0.80	Bognár, 2002 (egg-plants, stew)
04070	Jute mallow, picked leaves, boiled, drained (without salt)	0.95	Bognár, 2002 (spinach, boiled)
04071	Jute mallow, picked leaves, stewed (without salt)	0.81	Bognár, 2002 (spinach, stew)
04072	Kale, Ethiopian (kanzera), leaves, boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04073	Kale, Ethiopian (kanzera), leaves, steamed (without salt)	1.15	Matthews, 1975 (kale, steamed)
04074	Kale (sukuma wiki), boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04075	Kale (sukuma wiki), steamed (without salt)	1.15	Matthews, 1975 (kale, steamed)
04076	Leeks, bulb and stem, boiled, drained (without salt)	0.83	Bergström, 1994 (leek, boiled)
04077	Mushroom, boiled, drained (without salt)	0.73	Matthews, 1975 (mushrooms, boiled or simmered)
04078	Mushroom, stewed (without salt)	0.81	Bognár, 2002 (mixed mushrooms, fresh, stew)

Code	Food description	Yield Factor	Source
04079	Mushroom, dried, boiled, drained (without salt)	1.75	Bognár, 2002 (mushroom, dried, boiled)
04080	Okra, Fresh, boiled, drained (without salt)	1.10	Matthews, 1975 (okra, trimmed, whole, boiled)
04081	Okra, Fresh, stewed (without salt)	0.92	Matthews, 1975 (okra, trimmed, cut, steamed)
04082	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	0.92	Bognár, 2002 (pumpkin (squash), boiled)
04083	Pumpkin, flesh, yellow w/o seeds, boiled, drained (without salt)	1.13	Bognár, 2002 (pumpkin (squash), stewed)
04084	Pumpkin, leaves, boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04085	Pumpkin, leaves, steamed (without salt)	1.15	Matthews, 1975 (kale, steamed)
04086	Spider plant, leaves, boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04087	Spider plant, leaves, steamed (without salt)	1.15	Matthews, 1975 (kale, steamed)
04088	Spinach, leaves, boiled, drained (without salt)	0.95	Bognár, 2002 (spinach, boiled)
04089	Spinach, leaves, stewed (without salt)	0.81	Bognár, 2002 (spinach, stew)
04090	Spinach, Swiss chard, leaves, boiled, drained (without salt)	0.95	Bognár, 2002 (spinach, boiled)
04091	Spinach, Swiss chard, leaves, stewed (without salt)	0.81	Bognár, 2002 (spinach, stew)
04092	Squash, butternut, peeled, flesh, boiled, drained (without salt)	0.89	Matthews, 1975 (squash, winter, boiled or steamed)
04093	Squash, butternut, peeled, flesh, steamed (without salt)	0.89	Matthews, 1975 (squash, winter, boiled or steamed)
04094	Squash, butternut, peeled, flesh, baked (without salt)	0.85	Matthews, 1975 (squash, winter, baked)
04095	Stinging nettle, leaves, boiled, drained (without salt)	1.05	Matthews, 1975 (kale, boiled)
04096	Stinging nettle, leaves, steamed (without salt)	1.15	Matthews, 1975 (kale, steamed)
04097	Tomato, green, boiled, drained (without salt)	0.78	Bergström, 1994 (tomato, boiled)
04098	Tomato, red, ripe, boiled, drained (without salt)	0.78	Bergström, 1994 (tomato, boiled)
04099	Vine (African) spinach, picked leaves, boiled, drained (without salt)	0.95	Bognár, 2002 (spinach, boiled)
GROUP F - MILK AND DAIRY PRODUCTS			
06027	Milk ,camel, whole, fresh, boiled	0.85	Own measurement (milk, whole, boiled for 3 minutes)
06028	Milk, cow, skimmed, boiled	0.85	Own measurement (milk, whole, boiled for 3 minutes)
06029	Milk, cow, whole, fresh, boiled	0.85	Own measurement (milk, whole, boiled for 3 minutes)
06030	Milk, goat, fluid, whole, boiled	0.85	Own measurement (milk, whole, boiled for 3 minutes)
06031	Milk, sheep, fluid, whole, boiled	0.85	Own measurement (milk, whole, boiled for 3 minutes)
GROUP H - FISH AND SEAFOOD			
08015	Cod, fillet, steamed (without salt)	0.82	uFiSh1.0, 2016 (091110/091118)
08016	Cod, fillet, grilled (without salt and fat)	0.75	uFiSh1.0, 2016 (091232/091240)
08017	Cod, fillet, boiled in recipe (without salt and fat)	0.82	uFiSh1.0, 2016 (091171/091179)
08018	Dagaa fish (omena), dried, stewed (without salt)	2.22	Own mesurement
08019	Eel, steamed (without salt)	0.83	uFiSh, 2016 (own estimation)
08020	Eel, grilled (without salt and fat)	0.77	uFiSh, 2016 (own estimation)
08021	Eel, boiled in recipe (without salt and fat)	0.83	uFiSh, 2016 (own estimation)
08022	Herring stock, steamed (without salt)	0.83	uFiSh, 2016 (own estimation)
08023	Herring stock, steamed (without salt)	0.77	uFiSh, 2016 (own estimation)
08024	Herring stock, boiled in recipe (without salt and fat)	0.83	uFiSh, 2016 (own estimation)
08025	Lungfish, fillet, steamed (without salt)	0.83	uFiSh, 2016 (own estimation)
08026	Lungfish, fillet, grilled (without salt and fat)	0.77	uFiSh, 2016 (own estimation)

Code	Food description	Yield Factor	Source
08027	Lungfish, fillet, boiled in recipe (without salt and fat)	0.83	uFiSh, 2016 (own estimation)
08028	Mudfish (kamongo), fillet, steamed (without salt)	0.83	uFiSh1.0, 2016 (091075)
08029	Mudfish (kamongo), fillet, grilled (without salt and fat)	0.77	uFiSh, 2016 (own estimation)
08030	Mudfish (kamongo), fillet, boiled in recipe (without salt and fat)	0.83	uFiSh1.0, 2016 (091136)
08031	Prawns, fresh, steamed (without salt)	0.83	uFiSh1.0, 2016 (092065)
08032	Prawns, fresh, grilled (without salt and fat)	0.86	uFiSh1.0, 2016 (092141)
08033	Prawns, fresh, boiled in recipe (without salt and fat)	0.83	uFiSh1.0, 2016 (092103)
08034	Sardine, fresh, steamed (without salt)	0.85	Bergström, 1994 (fish steamed/ poached, average)
08035	Sardine, fresh, grilled (without salt and fat)	0.73	Bergström, 1994 (sardines, grilled)
08036	Sardine, fresh, boiled in recipe (without salt and fat)	0.85	Bergström, 1994 (fish steamed/ poached, average)
08037	Shark, steamed (without salt)	0.83	uFiSh, 2016 (own estimation)
08038	Shark, grilled (without salt and fat)	0.77	uFiSh, 2016 (own estimation)
08039	Shark, boiled in recipe (without salt and fat)	0.83	uFiSh, 2016 (own estimation)
08040	Tuna, steamed (without salt)	0.80	Bergström, 1994 (tuna, boiled)
08041	Tuna, grilled (without salt and fat)	0.74	Bergström, 1994 (tuna, baked in oven)
08042	Tuna, boiled in recipe (without salt and fat)	0.80	Bergström, 1994 (tuna, boiled)
G	**MEATS, POULTRY AND EGGS**		
07027	Egg, chicken, whole, boiled (without salt)	1.00	Bergström, 1994 (eggs, boiled)
07028	Egg, chicken, whole, poached (without salt)	0.88	Bergström, 1994 (eggs, poached)
07029	Egg, chicken, yolk, boiled (without salt)	1.00	Bergström, 1994 (eggs, boiled)
07030	Egg, chicken, white (albumin), boiled (without salt)	1.00	Bergström, 1994 (eggs, boiled)
07031	Beef, high fat, w/o bones, boiled (without salt)	0.60	Bergström, 1994 (Beef, small pieces, boiled, well done)
07032	Beef, high fat, w/o bones, grilled (without salt and fat)	0.72	Bognár, 2002 (Roast beef (chuck, leg, shoulder, top round) medium grill, broil, barbecue)
07033	Beef, high fat, w/o bones, stewed (without salt)	0.64	Bergström, 1994 (Beef, stewing steak)
07034	Beef, lean, boiled (without salt)	0.49	Bergström, 1994 (Beef, lean, boiled)
07035	Beef, lean, grilled (without salt and fat)	0.72	Bognár, 2002 (Roast beef (chuck, leg, shoulder, top round) medium grill, broil, barbecue)
07036	Beef, lean, stewed (without salt)	0.53	Bergström, 1994 (Beef, lean, stewed)
07037	Beef, liver, boiled (without salt)	0.66	Bergström, 1994 (liver, beef, boiled)
07038	Beef, medium fat, without bones, boiled (without salt)	0.60	Bergström, 1994 (Beef, small pieces, boiled, well done)
07039	Beef, medium fat, without bones, grilled (without salt and fat)	0.72	Bognár, 2002 (Roast beef (chuck, leg, shoulder, top round) medium grill, broil, barbecue)
07040	Beef, medium fat, without bones, stewed (without salt)	0.64	Bergström, 1994 (Beef, stewing steak)
07041	Chicken, unspecified part, w/o bone, meat&skin, boiled (without salt)	0.79	Bergström, 1994 (chicken, boiled, average)
07042	Chicken, unspecified part, w/o bone, meat&skin, grilled (without salt and fat)	0.78	Bergström, 1994 (chicken grilled)
07043	Goat, lean, boiled (without salt)	0.67	Bergström, 1994 (lamb, brisket, boiled)
07044	Goat, lean, grilled (without salt and fat)	0.69	Bergström, 1994 (lamb, chops, loin, grilled)
07045	Goat, liver, boiled (without salt)	0.66	Bergström, 1994 (liver, beef, boiled)
07046	Goat, medium fat, boiled (without salt)	0.67	Bergström, 1994 (lamb, brisket, boiled)
07047	Goat, medium fat, grilled (without salt and fat)	0.69	Bergström, 1994 (lamb, chops, loin, grilled)
07048	Lamb, liver, boiled (without salt)	0.66	Bergström, 1994 (liver, beef, boiled)

Code	Food description	Yield Factor	Source
07049	Lamb, unspecified part, boiled (without salt)	0.67	Bergström, 1994 (lamb, brisket, boiled)
07050	Lamb, unspecified part, grilled (without salt and fat)	0.69	Bergström, 1994 (lamb, chops, loin, grilled)
07051	Pork, meat, unspecified part, boiled (without salt)	0.65	Bergström, 1994 (pork, big pieces, boiled/steamed)
07052	Pork, meat, unspecified part, grilled (without salt and fat)	0.70	Bergström, 1994 (pork, grilled, average)
07053	Rabbit meat, stewed (without salt)	0.68	Matthews, 1975 (rabbit, domesticated, stewed)
07054	Rabbit meat, roasted (without salt and fat)	0.88	Matthews, 1975 (rabbit, domesticated, roasted)
07055	Sausage, beef, grilled (without salt and fat)	0.75	Bergström, 1994 (sausage, beef, grilled)
07056	Sausage, frankfurters, boiled (without salt)	0.97	Bergström, 1994 (sausage, type hot dog, Franks, boiled)
07057	Sausage, liver, grilled (without salt and fat)	0.75	Bergström, 1994 (sausage, beef, grilled)
07058	Sausage, pork, boiled (without salt)	0.92	Bergström, 1994 (sausage, pork, boiled, sliced)
07059	Sausage, pork, grilled (without salt and fat)	0.72	Bergström, 1994 (sausage, pork, grilled)

ANNEX 2: Limit Of Quantification (LOQ) of the Components

Component Name		LOQ	Method of determination
WATER	Water (g/100g)	LOQ-0.002	CALCULATED
NITROGEN	Nitrogen (g/100g)		CALCULATED
PROT (formerly PROTCNT)	Protein (g/100g)	LOQ-0.05	ISO 5983-2 (Kjeldhal Method)
FAT or [FATCE]	Fat (g/100g)	LOQ-0.002	AOAC 2000.18 (Solvent extraction)
CHOAVLDF	Carbohydrate available (g/100g)		CALCULATED
FIBTG or [FIBC]	Total Dietary Fibre (g/100g)	LOQ-0.02	AOAC (2012) 985.29
ASH	Ash (g/100g)	LOQ-0.02	AOAC 945.46 (Muffle furnace)
CA	Ca (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
FE	Fe (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
MG	Mg (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
P	P (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
K	K (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
NA	Na (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
ZN	Zn (mg/100g)	LOQ-0.02	ISO 8070-IDF 119
SE	Selenium (mcg/100)	LOQ-0.005 ppm	ISO 8070-IDF 119
VITA_RAE	Vit A-RAE (mcg/100g)		
RETOL	Vit A (Retinol) (mcg/100g)	LOQ-2.1	SOP LBFD-99076
CARTBEQ or [CARTB]	ß-carotene equivalent (mcg/100g)	LOQ-0.55	SOP LBFD-02188 (HPLC-DAD)
THIA	Vit B1 (Thiamin) (mg/100g)	LOQ-0.08	SOP LBFD-00089 AOAC (2012) 942.23
RIBF	Vit B2 (Riboflavin) (mg/100g)	LOQ-0.08	SOP LBFD-00084 AOAC (2012) 970.65
NIA	Niacin (mg/100g)	LOQ-0.4	SOP LBFD-05304 AOAC (2012) 985.34
FOL	Total Folic acid (mcg/100g)	LOQ-1	USFDA (1996) Micro Assay)
VITB12	Vit B12 (mcg/100g)	LOQ-0.05	SOP LBFD-00114 AOAC (2012) 952.20
VITC	Vit C as L-ascorbic acid (mg/100g)	LOQ-0.15	SOP LBFD-00085
Cholesterol	Cholesterol g/100g	LOQ-0.0005	AOAC (2012) 994.10, GC/FID

Component Name		LOQ
Amino Acids	Alanine	LOQ-0.01
	Glycine	LOQ-0.01
	Valine	LOQ-0.01
	Leucine	LOQ-0.01
	Isoleucine	LOQ-0.01
	Threonine	LOQ-0.01
	Serine	LOQ-0.01
	Proline	LOQ-0.01
	Aspartic acid	LOQ-0.01
	Methionine	LOQ-0.01
	4-Hydroxyproline	LOQ-0.01
	Glutamic acid	LOQ-0.01
	Phenylalanine	LOQ-0.01
	Lysine	LOQ-0.01
	Histidine	LOQ-0.01
	Hydroxylysine	LOQ-0.2
	Tyrosine	LOQ-0.01
	Tryptophan	LOQ-0.01
	Cystine	LOQ-0.3
	Arginine	LOQ-0.01

ANNEX 3: Index of foods with English, scientific names, and corresponding reference sources

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
59	01001	Amaranth, whole grain, dry, raw	*Amaranthus spp*	KEN93-59, US28-20001, IN17-A002	30 - 32
47	01002	Amaranth, whole grain,flour	*Amaranthus spp*	KEN93-59, US28-20001,IN17-A001,IN17-A002	30 - 32
307 a	01003	Biscuit, Savoury		KEN93-307 a,AU14-02C10122,AU14-02C10117	30 - 32
307 b	01004	Biscuit, Sweet		KEN93-307 b,AU14-02C20287,AU14-02C20380	30 - 32
1	01005	Bread, Brown		KEN93-1,AU14-02B10605,AU14-02B10649,AU14-02B10751	30 - 32
2	01006	Bread, Sweet		KEN93-2,AU14-02B10603,AU14-02B10749	30 - 32
2	01007	Bread, White		KEN93-2,AU14-02B10603,AU14-02B10749	30 - 32
6	01008	Breakfast cereal, flakes of corn, fortified (iron, thiamin, riboflavin, niacin and folate)		KEN93-6, KEN93-7, ZA10-3243, AU14-02D10360, UK7-11-745	30 - 32
NEW	01009	Breakfast cereal, flakes of corn		KEN93-6, KEN93-7, ZA10-3243, UK7-11-745	33 - 35
25	01010	Breakfast cereal, wheat biscuits, Weetabix type		KEN93-25, ZA10-3244, UK7-11-774	33 - 35
308	01011	Buns, Currant		KEN93-308, UK7-11-1009, AU14-02E20116	33 - 35
	01012	Cake or cupcake, plain butter cake, commercial		AU14-02E10438,AU14-02E10465	33 - 35
309	01013	Cake, Fruit		KEN93-309,AU14-02E10443,AU14-02E10444,AU14-02E10530	33 - 35
310	01014	Cake, Sponge, homemade		KEN93-310,UK7-11-956, US28-18134	33 - 35
311	01015	Cake, Sponge, without fat		KEN93-311, UK7-11-957, KEN17-001014	33 - 35
312	01016	Cakes (Various Fancy Iced)		KEN93-312, UK7-11-839	33 - 35
312	01017	Cornflour, from maize starch		KEN93-8, AU14-02A20108, US28-20027, UK7-11-1045	33 - 35
12	01018	Maize, grain, white variety, whole, dry, raw	*Zea mays*	SGS, ZA10-3271, IN17-A006	33 - 35
12f	01019	Maize, grain, yellow variety, whole, dry, raw	*Zea mays*	KEN93-12f, ZA10-3276, IN17-A006	36 - 38
13	01020	Maize meal, sifted, fortified, packaged, raw		SGS, ZA10-3398	36 - 38
16	01021	Maize, White, Degermed (Muthokoi)		KEN93-16,ZA10-3274, ZA10-3451,US28-20522	36 - 38
	01022	Maize , whole, flour, raw	*Zea mays*	SGS, IN17-’A006	36 - 38
	01023	Green Maize, white, whole, grain, fresh, raw	*Zea mays*	SGS, IN17-A007	36 - 38
18a	01024	Millet, bulrush, flour	*Pennisetum glaucum*	SGS, KEN93-18	36 - 38
18a	01025	Millet, bulrush, grain, dry, raw	*Pennisetum glaucum*	SGS, KEN93-18a, IN17-A003	36 - 38
18b	01026	Millet, finger, flour	*Eleusine coracana*	KEN93-18b,k031,	36 - 38
18b	01027	Millet, Finger, Grain, Dried, Raw	*Eleusine coracana*	KEN93-18b,k031, IN17-A010, AU14-02A10347	36 - 38
19	01028	Millet Yeast (germinated millet seeds)	*Eleusine coracana*	KEN93-19, KEN17-001027	36 - 38
339	01029	Oat bran, unprocessed, uncooked		KEN93-339, AU14-02A10356, ZA10-3304, US28-20033	39 - 41

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
9	01030	Pasta, macaroni, plain, dry, raw-imported		KEN93-9, AU14-02A10358	39 - 41
	01031	Pasta, spaghetti, dried, raw-imported		AU14-02A10358, US28-20420	39 - 41
	01032	Rice, flour, raw	*Oryza sativa*	AU14-02A20106, ZA10-3381, UK7-11-021	39 - 41
20c	01033	Rice, parboiled, raw	*Oryza sativa*	KEN93-20,IN17-A014	39 - 41
20	01034	Rice, white, milled, polished grain, dry, raw	*Oryza sativa*	SGS, IN17-A015, AU14-02A10368	39 - 41
21	01035	Semolina, raw	*Triticum aestivum*	KEN93-21, AU14-02A10353, US28-20466, UK7-11-903, IN17-A022	39 - 41
329	01036	Scone, plain, commercial		KEN93-329,AU14-02E20091,ZA10-3237,ZA10-3319,ZA10-3411	39 - 41
22c	01037	Sorghum, Grain, Red, Dried, Raw	*Sorghum bicolor*	KEN93-22c,2E, KEN17-22a, SGS, IN17-A005	39 - 41
22c	01038	Sorghum, Grain, Red, Flour	*Sorghum bicolor*	KEN93-22c,2E, KEN17-22a, SGS, US28-20067	42 - 44
22a	01039	Sorghum, grain, white, dry, raw	*Sorghum bicolor*	SGS,KEN93-22a, IN17-A005	42 - 44
22a	01040	Sorghum, grain, white, flour	*Sorghum bicolor*	SGS,KEN93-22a, IN17-A005	42 - 44
18a	01025	Millet, bulrush, grain, dry, raw	*Pennisetum glaucum*	SGS, KEN93-18a, IN17-A003	42 - 44
	01041	Teff, raw		US28-20142, KEN18-001025	42 - 44
	01042	Wheat Flour-Atta	*Triticum aestivum*	KEN93-27b, AU14-02A20104,IN17-A019, IN17-A020	42 - 44
27	01043	Wheat Flour (refined/ fortified/sifted packaged), raw	*Triticum aestivum*	SGS, IN17-A018, ZA10-3415	42 - 44
27b	01044	Wheat, whole, flour, raw	*Triticum aestivum*	SGS, KEN93-26a,IN17-A020	42 - 44
26a	01045	Wheat, whole, grain, dry, raw	*Triticum aestivum*	SGS, KEN93-26a,IN17-A020	42 - 44
29 c	02001	Arrowroot, flour	*Colocasia esculenta*	KEN93-29c, AU14-02A20100	42 - 44
29a	02002	Arrowroot, peeled,raw	*Colocasia esculenta*	KEN93-29a, K006, US28-11697, UK7-11-001	42 - 44
	02003	Banana, BITA 3, dried, flour		d14-0601332, US28-09041	45 - 47
115 (a)	02004	Banana, plantain, green, raw		KEN93-115(a), ZA10-3540, IN17-D063	45 - 47
30	02005	Beet root, peeled, raw	*Beta vulgaris*	KEN93-30, IN17-C009, AU14-13A11670	45 - 47
	02006	Cassava, flour, raw	*Manhiot esculenta*	WA12-02_004, US28-11134	45 - 47
31 a	02007	Cassava, root, white, peeled, raw	*Manhiot esculenta*	KEN93-31a, AU14-13A11690, US28-11134, IN-F015	45 - 47
NEW	02008	Cassava, root, yellow, peeled, raw	*Manhiot esculenta*	AU14-13A11689, US28-11134	45 - 47
34 a	02009	Potato, Irish (English), white variety, peeled, raw	*Solanum tuberosum L.*	SGS, AU14-13A11762, IN17-F006	45 - 47
35 b	02010	Radish, round, red skin, raw	*Raphanus sativus*	KEN93-35b, IN17-F011, AU14-13A11804	45 - 47
35 a	02011	Radish, long, red skin, raw	*Raphanus sativus*	KEN93-148a, IN17-F009, AU14-13A12163	45 - 47
35 c	02012	Radish, white skin, raw	*Raphanus sativus*	KEN93-35c, IN17-F012, AU14-13A11805	48 - 50
33a	02013	Sweet potato, brown skin, peeled, raw	*Ipomea batatas*	KEN93-33a, IN17-F013, UK7-13-463	48 - 50
	02014	Sweet potato, orange, biofortified, raw	*Ipomoea batatas*	k019, AU14-13A11712	48 - 50
34 b	02015	Sweet potato, pink skin	*Ipomea batatas*	KEN93-33a, IN17-F014	48 - 50

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
36	02016	Taro, peeled, raw	*Colocasia esculenta*	KEN93-36, AU14-13A11740	48 - 50
37	02017	Turnip, root, raw	*Brassica rapa*	KEN93-37, AU14-13A11744	48 - 50
38 b	02018	Yam, Flour		KEN93-38 b, IN17-F019	48 - 50
38 a	02019	Yam, white, raw	*Dioscorea rotundata*	KEN93-38a, US28-11601, UK7-13-397, IN17-F019	48 - 50
	03001	Beans, broad, dry, raw	*Vicia faba*	UP1-VIF001, US28-16052	51 - 53
43(a)	03002	Beans, broad, fresh, raw	*Vicia faba*	KEN93-43(a), AU14-13A11776	51 - 53
48	03003	Beans, cluster, fresh, raw	*Cyamopsis tetragonoloba*	KEN93-48, IN17-D039	51 - 53
41	03004	Beans, kidney, dry, raw	*Phaseolus vulgaris var. Kidney*	SGS,AU14-13A20124,UP1-PHV003	51 - 53
52	03005	Beans, lima, dry, raw	*Phaseolus lunatus*	KEN93-52, UP1-PHL001,AU14-13A20127	51 - 53
52	03006	Bean, red, fresh, raw		AU14-13A11778	54 - 56
	03007	BEANS,SHELLIE,CND,SOL & LIQUIDS		US28-11050	54 - 56
46(b)	03008	Bonavist, dry, raw	*Lablab purpureus*	KEN93-46(b), KEN93-46(b), KEN93-46(b), dp10-0400065, UP1-LAP001, US28-16067	54 - 56
46 (a)	03009	Bonavist, fresh, raw	*Lablab purpureus*	KEN93-46 (a), US28-11224	54 - 56
47	03010	Chick peas, whole, dry, raw	*Cicer arietinum*	KEN93-47, KEN93-47, KEN93-47, UP1-CIA001, IN17-B002	54 - 56
49(a)	03011	Cowpeas, dry, raw	*Vigna unguiculata*	KEN93-49(a), KEN93-49(b), KEN93-49(c), KEN93-49(d),KEN93-49(e), UP1-VUN001, IN17-B005, IN17-B006	57 - 59
49	03012	Cowpeas, fresh, raw	*Vigna unguiculata*	KEN93-49, US28-11191	57 - 59
57(a)	03013	Flour, soya, full fat	*Glycine max*	KEN93-57a, US28-16115	57 - 59
57(b)	03014	Flour, soya, low fat	*Glycine max*	KEN93-31a, AU14-13A11690	57 - 59
54(a)(i)	03015	Garden peas, fresh, raw	*Pisum sativum*	KEN93-54(a)(i), KEN93-54(a)(ii),SGS-10012,IN17_rev-D061	57 - 59
54	03016	Garden peas, dry, raw	*Pisum sativum*	KEN93-54, IN17-B017, UP1-PIS001	57 - 59
45	03017	Gram, black, dry, raw	*Vigna mungo*	SGS, IN17-B004, UP1-VIR001	60 - 62
42	03018	Gram, flour, raw	*Vigna mungo*	KEN93-42, UK7-11-896	60 - 62
50	03019	Gram, green, dry, raw	*Vigna radiata*	KEN93-50b, KEN93-50c, KEN93-50d, IN17-B011, UP1-VIR001	60 - 62
51	03020	Lentils, whole, dry, raw	*Lens culinaris*	KEN93-51, KEN93-51,IN17-B014,UP1-LEC001	60 - 62
55	03021	Pigeon peas, dry, raw	*Cajanus cajan*	KEN93-55 (a), KEN93-55(a)(i),KEN93-55(a)(i),KEN93-55(a)(ii),KEN93-55(b),KEN93-55(b),KEN93-55(c’),KEN93-55(c)(i),KEN93-55(c)(i),KEN93-55(c)(ii),KEN93-55(c)(ii),KEN93-55(c)(ii),KEN93-55(c)(ii),KEN93-55(c)(ii), IN17-B022UP1-CAC001	63 - 65
144	03022	Soybean, dry, raw	*Glycine max*	KEN93-56(a) ,KEN93-56(a)(i),KEN93-56(b),KEN93-56(c)(i),KEN93-56(c)(i),AU14-13A20129,IN17-B025	63 - 65
70	04001	Amaranth, leaves, picked, raw	*Amaranthus gangeticus*	SGS, IN17-C004, ZA10-3785, KEN93-70	63 - 65
102	04002	Bitter gourd, whole, different varieties, raw	*Momordica charantia*	KEIN93-102, IN17-D004/D005/D006, UK7-13-252	63 - 65
87	04003	Black (African) nightshade, indigenous, leaves, picked, raw	*Solanum scabrum*	SGS, KEN93-87, k030, ZA10-4203	63 - 65
78	04004	Broccoli, tops and stems, raw	*Brassica oleracea var. italica*	KEN93-78, AU14-13A11681, US28-11090	66 - 68

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
80c	04005	Cabbage, leaf head, Chinese, raw	*Brassica oleracea var. capitata*	SGS, AU14-13A11782, IN17-C013	66 - 68
80c	04006	Cabbage, leaf head, red, raw	*Brassica oleracea var. capitata*	KEN93-80b, AU14-13A11784, ZA10-3897	66 - 68
80d	04007	Cabbage, leaf head, white, raw	*Brassica oleracea var. capitata*	SGS, KEN93-80d, AU14-13A11685, IN17-C015	66 - 68
103a	04008	Capsicum (sweet pepper), green, raw	*Capsicum annum*	KEN93-103/103a, AU14-13A11686, IN17-D003	66 - 68
103a	04009	Capsicum (sweet pepper), red, raw	*Capsicum annum*	KEN93-103b, AU14-13A11687, IN17-D034, KEN17-Capsicum, green, raw	66 - 68
NEW	04010	Capsicum (sweet pepper), yellow, raw	*Capsicum annum*	IN17-D035, UK7-13-526, KEN17-Capsicum, green, raw	69 - 71
104	04011	Carrot, peeled, raw	*Daucus carota*	SGS, KEN93-104, AU14-13A11671, IN17-F002	69 - 71
105	04012	Cauliflower, tops and stems, raw	*Brassica oleracea var. botrytis*	KEN93-105, AU14-13A11692, IN17-D036	69 - 71
82a	04013	Celery, stalk, raw	*Apium graveolens*	KEN93-82a, AU14-13A11693, IN17-D037	69 - 71
NEW	04014	Courgette, green, unpeeled, raw	*C. pepo var. Cylindrica*	AU14-13A11736, IN17-D077	69 - 71
83	04015	Cowpea, leaves, picked, raw	*Vigna unguiculata*	SGS, ZA10-4198, KEN93-83, US28-11201	69 - 71
106	04016	Cucumber, green, unpeeled, raw	*Cucumis sativus*	KEN93-106, AU14-13A11697, IN17-D044	72 - 74
101	04017	Eggplant / Brinjal, different varieties, whole edible, raw	*Solalum melongena*	KEN93-101, AU14-13A11702, IN17-D031	72 - 74
NEW	04018	Jute mallow, picked leaves, raw	*Corchorus olitorius*	SGS, ve26, ve8, KEN17-Spinach leaves, raw	72 - 74
NEW	04019	Kale, Ethiopian (kanzera), leaves, raw	*Brassica carinata*	SGS, KEN17-Kale (sukuma wiki), raw	72 - 74
85	04020	Kale (sukuma wiki) raw	*Brassica oleracea var. acephala*	SGS, KEN93-85, US28-11233, ZA10-4127	72 - 74
108	04021	Leeks, bulb and stem, raw	*Allium porrum*	KEN93-108, AU14-13A11706, ZA10-3722	72 - 74
86	04022	Lettuce, not further defined, raw	*Lactuca sativa*	KEN93-86, AU14-13A11909, IN17-C025	72 - 74
109a	04023	Mushroom, fresh, raw	*Agaricus spp.*	KEN93-109, AU14-13A11715, IN17-J001	75 - 77
109c	04024	Mushroom,Dried,Raw	*Agaricus spp.*	KEN93-109(c), IN17-J004, US28-11268	75 - 77
109d	04025	Mushroom, raw, canned in brine (drained)	*Agaricus spp.*	KEN93-109d, AU14-13A11790, ZA10-4136	75 - 77
	04026	Okra, fresh, raw	*Abelmoschus esculentus*	ZA10-4139, AU14-13A12563	75 - 77
NEW	04027	Pumpkin, flesh, yellow w/o seeds, raw	*Cucubita maxima*	SGS, AU14-13A11738, d11, IN17-D066	75 - 77
92	04028	Pumpkin, leaves, raw	*Cucurbita maxima*	IN17-C030, ve26, US28-11418	75 - 77
NEW	04018	Jute mallow, picked leaves, raw	*Corchorus olitorius*	SGS, ve26, ve8, KEN17-Spinach leaves, raw	75 - 77
84	04029	Spider plant, leaves, raw	*Gynandropsis gynandra*	KEN93-84, ve7, ZA10-4197, KEN17-Spinach, leaves, raw, KEN18-004018	75 - 77
95	04030	Spinach, leaves, raw	*Spinaccia oleracea*	KEN93-95, AU14-13A11703, IN17-C033	78 - 80
NEW	04031	Spinach, Swiss chard, leaves, raw	*Beta vulgaris ssp. vulgaris*	SGS, ZA10-4168, KEN17-Spinach, leaves, raw	78 - 80
NEW	04032	Squash, butternut, peeled, flesh, raw	*Cucurbita moschata*	SGS, AU14-13A11734, ZA10-4174	78 - 80
NEW	04033	Stinging nettle, leaves, raw	*Urtica dioica*	dp10, ZA10	78 - 80
96	04034	Sweet Potato (Leaves)		KEN93-96, US28-11505, ZA10-4208	78 - 80

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
NEW	04035	Tomato, green, raw	*Solanum lycopersicum*	IN17-D074, US28-11527, KEN17-Tomato, red, ripe raw	78 - 80
100/112	04036	Tomato, red, ripe, raw	*Solanum lycopersicum*	SGS, KEN93-100/112, IN17-D75	78 - 80
353	04037	Tomato, canned, whole contents		KEN93-353, AU14-13A11748, ZA10-4191	81 - 83
NEW	04038	Vine (African) spinach, picked leaves, raw	*Basella alba*	SGS, KEN17-Spinach, leaves, raw, ve7, ve8, ve27	81 - 83
NEW	05001	Apple, green skin, unpeeled, raw	*Malus domesticus*	KEN93-113, AU14-06D10502/06D10503, ZA10-4222, IN17-E002	81 - 83
NEW	05002	Apple, red, unpeeled, raw	*Malus domesticus*	KEN93-113, AU14-06D10505/06D10504/06D10507/06D10501/06D10530, ZA10-4223	81 - 83
114	05003	Avocado, ripe, raw	*Persea americana*	SGS, KEN93-114, AU14-13A11674, IN17-E007	81 - 83
115c	05004	Banana, cavendish, raw	*Musa spp.*	SGS, KEN93-115c, AU14-06D10517, IN17-E009/E010/E011/E012	81 - 83
116	05005	Baobab fruit, powderly part, dry, raw	*Adansonia digitata*	SGS	81 - 83
118	05006	Custard apple, peeled, raw	*Annona squamosa*	KEN93-118, IN17-E016, AU14-06D10496	81 - 83
119b	05007	Date, dried	*Phoenix dactylifera*	KEN93-119b, AU14-06C10211, IN17-E017/E018	81 - 83
119a	05008	Date, raw	*Phoenix dactylifera*	KEN93-119a, ZA10-4245, UK-14-083/14-084	84 - 86
120	05009	Doumpalm fruit, raw	*Hyphaene thebaica*	KEN93-120,k001	84 - 86
121c	05010	Grapes, green, raw	*Vitis vinifera*	KEN93-121c, IN17-E023/E026, AU14-06D10474, ZA10-3550	84 - 86
143	05011	Guava, pink-fleshed, raw	*Psidium guajava*	SGS, KEN93-143, IN17-E029, US28-09139	84 - 86
123	05012	Jackfruit, fruit, yellow-fleshed, peeled, raw	*Artocarpus heterophyllus*	SGS, IN17-E030	84 - 86
125a	05013	Lemon, juice, home squeezed	*Citrus limon*	KEN93-125a, AU14-01B30367, ZA10-3578, IN17-E033	84 - 86
	05014	Lemon peel, raw	*Citrus limon*	US28-09156	84 - 86
125b	05015	Lemon, pulp, raw	*Citrus limon*	KEN93-125b, AU14-06B10080, ZA10-3669	84 - 86
126a	05016	Lime, juice	*Citrus × aurantiifolia*	KEN93-126a, AU14-01B30326, US28-09160	84 - 86
126b	05017	Lime, pulp, raw	*Citrus × aurantifolia*	KEN93-126b, AU14-06B10084, ZA10-4219	87- 89
127	05018	Loquat, peeled, raw	*Eriobotrya japonica*	SGS, KEN93-127, AU14-06D10481	87- 89
128b/129	05019	Mango, ripe, raw	*Mangifera indica*	KEN93-128b/129, AU14-06D10478, US28-09176, IN17-E036-to-E042, KEN17-Mango unripe, raw	87- 89
128a/b	05020	Mango, unripe, raw	*Mangifera indica*	KEN93-128a/128b, IN17-D057	87- 89
130	05021	Mulberry, raw	*Morus spp.*	KEN93-130, ZA10-3634; AU14-06A10102	87- 89
135b/263	05022	Orange, Juice	*Citrus sinensis*	KEN93-135 (b),KEN93-263,AU14-01B20408,AU14-01B20441,AU14-01B30354,AU14-01B30358,AU14-01B30327, ZA10-3561	87- 89
135a	05023	Orange, pulp, raw	*Citrus sinensis*	SGS, KEN93-135a/135c, AU14-06B10095/06B10088, IN17-E047	87- 89
136	05024	Papaya, yellow skin, peeled, raw	*Carica papaya*	SGS, KEN-136, AU14-06D10480, IN17-E049	87- 89

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
NEW	05025	Passion fruit, dark purple skin, raw	*Passiflora edulis*	SGS, AU14-06D10479, US28-09231	87- 89
137	05026	Passion Fruit, juice	*Passiflora edulis*	KEN93-137, US28-09232, US28-09233, UK7-14-285	90 - 92
138a	05027	Peach, yellow-fleshed, unpeeled, raw	*Prunus persica*	KEN93-138a, AU14-06C10212, IN17-E050, US28-09236, US28-09236	90 - 92
139	05028	Pear, unpeeled, raw	*Pyrus communis*	KEN93-139, AU14-06D10513, IN17-E051	90 - 92
140b	05029	Pineapple, canned in syrup, whole contents	*Ananas comosus*	KEN93-140b, AU14-06D10467	90 - 92
140a	05030	Pineapple, raw		SGS, KEN93-140a, IN17-E053	90 - 92
141	05031	Plum, purple skin, raw	*Prunus domestica*	KEN93-141, AU14-06C10217, IN17-E054, ZA10_3570	90 - 92
142	05032	Pomegranate, raw	*Punica granatum*	KEN93-142,AU14-06D10494, IN17-E055, ZA10-3650	90 - 92
144	05033	Raspberry, raw	*Rubus idaeus*	KEN93-144, AU14-06A10109, ZA10-3595	90 - 92
147	05034	Strawberry, raw	*Fragaria X ananassa*	KEN93-147, AU14-06A10103, IN17-E063, ZA10-3573	90 - 92
148b	05035	Tangerine, juice, non-commercial	*Citrus reticulata*	KEN93-148b, US28-09221	93 - 95
148a	05036	Tangerine, pulp, raw	*Citrus reticulata*	KEN93-148a, AU14-06B10082	93 - 95
149	05037	Tree tomato, dark red skin, peeled, raw	*Solanum betaceum*	SGS	93 - 95
151	05038	Watermelon, fruit, green with white stripes, raw	*Citrullus lanatus*	SGS, IN17-E066	93 - 95
NEW	05039	Zambarau, peeled, raw	*Syzygium cuminii*	SGS	93 - 95
218	06001	Butter (cow milk), no added salt (~80-84% fat)		KEN93-218, AU14-04A10076	93 - 95
NEW	06002	Butter (cow milk), salted (~80% fat)		AU14-04A10074	93 - 95
223	06003	Cheese, cheddar, regular fat		KEN93-223,AU14-09B10181	93 - 95
221	06004	Cheese, cottage (cow milk), plain, skimmed		KEN93-221, AU14-09B20088	93 - 95
220	06005	Cheese, cottage (cow milk), plain, whole		AU14-09B20071	96 - 98
222	06006	Cheese, cottage, Milk, Cow, Sour		KEN93-222, US28-01012,US28-01014	96 - 98
235	06007	Cream, pure, 35% fat		KEN93-243, AU14-09A50042	96 - 98
243	06008	Ghee (cow milk)		KEN93-243, AU14-04A10077	96 - 98
320	06009	Ice cream, caramel flavour, regular fat		AU14-09D10233	96 - 98
320	06010	Ice cream, chocolate flavour, regular fat		US28-19270,US28-43541,US28-19893,US28-19899	96 - 98
	06011	Ice cream, strawberry flavour, regular fat		AU14-09D10227,US28-19271	96 - 98
320	06012	Ice cream, vanilla flavour, regular fat		KEN93-320, AU14-09D10212	96 - 98
	06013	Ice cream, vanilla flavour, with nuts, regular fat		AU14-09D10277	96 - 98
219	06014	Milk, camel, whole, fresh, raw	*Camelus dromedarius*	SGS, KEN93-219a/b, KEN17-Milk, cow, whole, fresh, raw	99 - 101
232	06015	Milk, cow, condensed, skimmed, sweetened, raw	*Bos taurus*	KEN93-232, AU14-09A20029	99 - 101
228	06016	Milk, cow, condensed, whole, sweetened, raw	*Bos taurus*	KEN93-232, AU14-09A20028	99 - 101

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
229/234	06017	Milk, cow, powder, skimmed	*Bostaurus*	KEN93-229/234, AU14-09A30022	99 - 101
230/233	06018	Milk, cow, powder, whole	*Bos taurus*	KEN93-233/230a/230b, AU14-09A30021/	99 - 101
227	06019	Milk, cow, skimmed, raw	*Bos taurus*	KEN93-227, AU14-09A10188	99 - 101
NEW	06020	Milk, cow, whole, fermented (Lala - Industrial)	*Bos taurus*	SGS, ZA10-2713	99 - 101
NEW	06021	Milk, cow, whole, fermented (Lala - mursik)	*Bos taurus*	SGS, ZA10-2713	99 - 101
226	06022	Milk, cow, whole, fresh, raw	*Bos taurus*	SGS	99 - 101
237	06023	Milk, goat, fluid, whole, raw	*Capra hircus*	KEN93-237, AU14-09A10187	102 - 104
238	06024	Milk, human/breast, mature, fluid		KEN93-238, US28-01107	102 - 104
239	06025	Milk, sheep, fluid, whole, raw	*Capra hircus*	KEN93-239, ZA10-2739, UK7-12-329	102 - 104
240	06026	Yoghurt, cow milk, whole, plain		SGS, KEN93-240, AU14-09C10093	102 - 104
169(i)	07001	Beef, high fat, w/o bones, raw	*Bos taurus*	SGS, AU14-08A11037	102 - 104
	07002	Beef, lean, raw	*Bos taurus*	SGS,AU14-08A11011,AU14-08A11043	102 - 104
161	07003	Beef, liver, raw		SGS, AU14-08D10167	105 - 107
169	07004	Beef, medium fat, w/o bones, raw	*Bos taurus*	SGS,US28-23093,AU14-08A11080	105 - 107
171	07005	CAMEL BLOOD, RAW	*Camelus dromedarius*	KEN93-171, CH02-081212-083209-091204-092208-092209	105 - 107
170	07006	Camel meat, raw	*Camels dromedarius*	KEN93-170, AU14-08B10074, AU14-08B10075	105 - 107
174	07007	COW'S BLOOD, RAW	*Bos taurus*	KEN93-174, CH02-081212-083209-091204-092208-092209	105 - 107
176	07008	DUCK,MEAT AND SKIN, RAW	*Anas Platyrayncha*	KEN93-176a, KEN93-176b, AU14-08C10459, AU14-08C10463	105 - 107
	07009	Chicken, unespecified part, w/o bones, meat&skin, raw	*Gallus gallus domesticus*	SGS, AU14-08B10092	105 - 107
178 (b)	07010	EGG,CHICKEN,WHITE (ALBUMEN),RAW	*Gallus gallus domesticus*	KEN93-178 (b), AU14-03A10080	108 - 110
177(b)	07011	Egg, chicken, whole, raw	*Gallus gallus domesticus*	SGS	108 - 110
178 (a)	07012	EGG,CHICKEN,YOLK,RAW	*Gallus gallus domesticus*	KEN93-178 (a), AU14-03A10082	108 - 110
182	07013	GOAT BLOOD, RAW	*Capra aegagrus hircus*	KEN93-171, CH02-081212-083209-091204-092208-092209	108 - 110
	07014	Goat, lean, raw	*Capra aegagrus hircus*	SGS,AU14-08B10092	108 - 110
184	07015	GOAT LIVER, RAW	*Capra aegagrus hircus*	KEN93-184,IN17-O008	108 - 110
	07016	Goat, medium fat, raw	*Capra aegagrus hircus*	SGS,AU14-08B10088	111 - 113
	07017	Guinea fowl, meat, with skin	*Oryctolagus cuniculus*	US28-05151, IN17-N013	111 - 113
187	07018	LAMB LIVER, RAW	*Ovis aries*	KEN93-187,AU14-08D10185	111 - 113
186/188/189	07019	LAMB, RAW (Unspecified part)	*Ovis aries*	KEN93-186,KEN93-186 (b),KEN93-188 (a),KEN93-189 (a), US28-17001	111 - 113
192/193/194	07020	PORK, MEAT,RAW (Unspecified part)	*Sus scrofa domesticus*	KEN93-192,KEN93-193 (a),KEN93-193 (b),KEN93-194 (a),ZA10-4336, US28-10001	111 - 113
195/196	07021	RABBIT MEAT, RAW	*Oryctolagus cuniculus*	KEN93-195,KEN93-196,AU14-08B10064	114 - 116
200 (a)	07022	Sausage, beef, raw		SGS,KEN93-200 (a),AU14-08E20128	114 - 116
201	07023	SAUSAGE, FRANKFURTERS		KEN93-201,AU14-08E20136	114 - 116
199	07024	SAUSAGE, LIVER, RAW		KEN93-199, US28-07041, UK7-19-106	114 - 116
202 a	07025	SAUSAGE, PORK, RAW		KEN93-202 a ,AU14-08E20131	114 - 116

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
	07026	Quail, flesh & skin, raw	*Oryctolagus cuniculus*	AU14-08C20016,US28-05157	114 - 116
206 (a)	08001	Cod, fillet, raw	*Gadus spp.*	KEN93-206a, UF1-091044/091052	117 - 119
209	08002	Dagaa fish (omena), dried, raw	*Rastrineobola argentea*	SGS,KEN93-209a	117 - 119
208a	08003	Eel, raw	*Anguilla spp.*	KEN93-208a, US28-15025	117 - 119
212	08004	Herring stock, raw	*Ilisha melastoma*	KEN93-208a, US28-15025	117 - 119
NEW	08005	Lungfish, fillet, raw	*Protopterus annectens*	SGS	117 - 119
	08006	Mudfish (kamongo), fillet, raw	*Clarias gariepinus*	UF1-091009	120 - 122
	08007	Mackerel, raw	*Rastrelliger kanagurta*	k011, AU14-05A10755, US28-15051, UF1-091059, IN17-P034	120 - 122
211 b	08008	Nile perch, dry, raw		KEN93-211b, KEN93-211b	120 - 122
211 a	08009	Nile perch, fillet w/o bones, raw	*Lates niloticus*	SGS	120 - 122
NEW	08010	Nile tilapia, fillet, w/o skin and bones, raw	*Oreochromis niloticus*	SGS, UF1-091001	120 - 122
213	08011	Prawns, flesh, raw	*Penaeidae*	KEN93-213,UF1-092027	120 - 122
214	08012	Sardine, flesh, raw	*Sardinella spp.*	KEN93-214, fi126, fi139, IN17-P071, UK7-16-401, AU14-05A10927	123 - 125
215	08013	Shark, raw	*Carcharhinus spp.*	KEN93-215, IN17-P072	123 - 125
217	08014	Tuna, raw	*Thunnus albacares/T. thynnus*	KEN93-217, US28-15117/15127, UK7-16-399	123 - 125
242	09001	Animal Fat/ Lard		KEN93-245, US28-04609	123 - 125
345	09002	CORN OIL	*Zea mays*	SGS, AU14-04C10095, US28-04518	123 - 125
242	09003	FISH LIVER OIL		KEN93-242,US28-04589,UK7-'17-488,ZA10-3482	123 - 125
	09004	MARGARINE,20% FAT		US28-04633	126 - 128
	09005	MARGARINE,60% FAT		US28-04612,US28-04613,US28-04614	126 - 128
246	09006	MARGARINE,80% FAT		KEN93-246,US28-04610,US28-04611	126 - 128
346	09007	MUSTARD SEED OIL	*Brassica*	AU14-04C10102	126 - 128
347	09008	OLIVE OIL	*Olea europaea*	KEN93-347,AU14-04C10094	126 - 128
348	09009	PEANUT OIL	*Arachis hypogaea*	KEN93-348,AU14-04C10092	126 - 128
249	09010	RED PALM OIL	*Elaeis guineensis*	KEN93-249 a, KEN93-249 b, BR94, AU14-04C10108	126 - 128
	09011	Shortening, commercial, vegetable fat		KEN93-248,AU14-04C10098	126 - 128
351	09012	Soya bean oil	*Glycine max*	SGS,AU14-04C10099	126 - 128
248	09013	SUN FLOWER OIL	*Helianthus annuus*	KEN93-248,AU14-04C10098	126 - 128
	10001	Bambara groundnuts, dried, raw	*Vigna subterranea*	k032,2E-0300008, 2E-0300009, UP1-VSU001	129 - 130
61(a)	10002	Coconut, fresh, mature fruit, flesh	*Anarcardiumoccidentale*	KEN93-61a, AU14-11B10210, IN17-H007	129 - 130
61(c)	10003	Coconut, fresh, young or immature, flesh	*Anarcardiumoccidentale*	KEN93-61(c),AU14-11B10213	129 - 130
61(b)	10004	COCONUT MEAT, DRIED,(DESICCATED)	*Anarcardiumoccidentale*	KEN93-61(b), ZA10-3462, US28-12108, IN17-H006	129 - 130
63	10005	Jack fruit, seed, mature, dry, raw	*Artocarpus heterophyllus*	SGS, KEN93-63,IN17-D052	129 - 130
64/286	10006	Mustard Seeds, Dry, Raw	*Brassica Nigra*	KEN93-64,KEN93-286,IN17-H013, ZA10-3474	129 - 130
	10007	Nut, almond, with or without skin, raw, unsalted	*Prunus amygdalus*	KEN93-341, AU14-11B10197, US28-12061, IN17-H001	129 - 130
60	10008	Nut, cashew, dry,raw, unsalted	*Anarcardiumoccidentale*	KEN93-60,AU14-11B10199	129 - 130

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
62(a)	10009	Nut, ground nut, with skin, unsalted, dry, raw	*Arachis hypogaea*	SGS, KEN93-62(a), AU14-11B10194, IN17-H012	129 - 130
	10010	Nut, macadamia, raw, unsalted	*Macadamia F. Muell*	SGS, AU14-11B10206	132 - 134
	10011	Nut, pistachio, raw, unsalted	*Pistacia vera*	AU14-11B10204, ZA10-3473, US28-12151, IN17-H018	132 - 134
325	10012	Peanut Butter		SGS, KEN93-62(a), AU14-11B10194, IN17-H012	132 - 134
65	10013	Seed, pumpkin, hulled & dried, unsalted	*C. maxima*	KEN93-65,AU14-11A10036	132 - 134
66	10014	Seed, sesame (sim sim) unsalted, dry, raw	*Sesamum indicum*	SGS,KEN93-66, AU14-11A10033	132 - 134
67	10015	Seed, sunflower, unsalted, dry, raw	*Helianthus annuus*	KEN93-67,AU14-11A10034, ZA10-3457	132 - 134
69	10016	Water Melon, Seed Kernel, Dry, Raw	*Citrullus lanatus*	KEN93-69, dp10, ZA10-3477,US28-12174,UK7-14-826	132 - 134
152	11001	Honey, Raw		KEN93-152,AU14-12A10076	132 - 134
268	11002	Sugarcane,Juice,Raw	*Saccharum officinarum*	KEN93-268,IN17-I002	132 - 134
155	11003	Sugar, white, granulated or lump		KEN93-155,AU14-12A10074,AU14-12A10097,AU14-12A10102,AU14-12A10073	132 - 134
258	12001	Beef, broth		AU14-10C10559, US28-06475, US28-06476	132 - 134
258	12002	Coconut, fresh, water	*Cocos nucifera*	KEN93-258,AU14-11B10212,AU14-11B10214	132 - 134
	12003	Coffee, instant, dry powder or granules		AU14-01B10303,UK7-17-158, US28-14236	132 - 134
315	12004	Drinking chocolate, powder		KEN93-315, ZA10-2829, AU14-12C10502	135 - 137
	12005	Tea, chai, instant dry powder		AU14-01B10485,US28-14366	135 - 137
270a	12007	Wine, Red		KEN93-270a,ZA10-4033,AU14-01A20107	135 - 137
270b	12008	Wine, White, Dry		KEN93-270b,UK7-17-755,AU14-01A20111	135 - 137
270 c	12009	Wine, White, Sweet		KEN93-270 c,UK7-17-233,AU14-01A20113	135 - 137
	13001	Anise seed		US28-02002, UK7-13-802	138 - 140
	13002	Baking powder, dry powder		AU14-14B10174, ZA10-4254, US28-18371, UK7-17-355	138 - 140
	13003	Baking soda (bicarbonate), dry powder		AU14-14B10166, US28-18372	138 - 140
	13004	Bay leaf, dried		US28-02002, UK7-13-802	138 - 140
274	13005	Cardamom, seeds, ground	*Elettaria cardamomum*	KEN93-274, AU14-10E10113, IN17-G020, IN17-G21	138 - 140
275a	13006	Chilli, fresh, raw	*Capsicum annuum*	KEN93-275a,AU14-13A11695,AU14-13A11694,IN17-G008	138 - 140
275b	13007	Chilli, dried	*Capsicum annuum*	KEN93-275b,IN17-G022,US28-11962	138 - 140
276	13008	Cinnamon, dried, ground	*Cinnamomum verum*	KEN93-276,AU14-10E10099	138 - 140
277	13009	Cloves, dry, raw	*Syzygium aromaticum*	KEN93-277, US28-02011, IN17-G023	138 - 140
259	13010	Coconut, Milk	*Cocos nucifera*	KEN93-259,AU14-11B10217,AU14-11B10233	141 - 143
88/279	13011	Coriander Leaves, fresh, raw	*Zingiberofficinale*	KEN93-88,KEN93-279, AU14-13A11698, IN17-G009	141 - 143
278	13012	Coriander seed, dried, ground	*Coriandrum sativum*	KEN93-278, AU14-10E10100, IN17-G024	141 - 143

Code KEN93	Code KFCT18	Food names in English	Scientific name	BiblioID	Page No.
280	13013	Cumin seeds, dried, raw	*Cuminum Cyminum*	KEN93-280, AU14-10E10093, IN17-G025	141 - 143
280	13014	Curry leaves, fresh, raw	*Murraya koenigii*	UK7-13-821, IN17-G010	141 - 143
281	13015	Curry powder		KEN93-281, AU14-10E10096, ZA10-4044, US28-02015	141 - 143
83	13016	Fenugreek leaves, fresh, raw	*Trigonella feonum graecum*	KEN93-83,ZA10-3957,UK7-13-243,IN17-C020	141 - 143
282	13017	Fenugreek seeds, raw	*Trigonella feonum graecum*	UK7-13-821, IN17-G010	141 - 143
	13018	Garam masala		ZA10-4051, UK7-13-829	141 - 143
283	13019	Garlic, peeled or unpeeled, fresh, raw	*Allium sativum*	KEN93-283, AU14-13A11667, IN17-G011	144 - 146
284	13020	Ginger, dried, ground	*Zingiberofficinale*	KEN93-284,AU14-10E10101	144 - 146
285	13021	Green Ginger (Mature), fresh, raw	*Zingiberofficinale*	KEN93-285, AU14-13A11704, IN17-G014	144 - 146
287	13022	Mint Leaves, fresh, raw	*Mentha spicata*	KEN93-287, AU14-13A11895, IN17-G016	144 - 146
110(a)	13023	Onion, mature, red skinned, peeled, fresh, raw	*Allium cepa*	KEN93-110(a), AU14-13A11903, IN17-G017	144 - 146
	13024	Onion, spring, raw	*Allium cepa*	KEN93-110(a), AU14-13A11903, IN17-D058	144 - 146
288	13025	Parsley, fresh, raw	*Petroselinum crispum*	KEN93-288,AU14-13A11901,ZA-3847	144 - 146
272	13026	Pepper, ground, black, dry, raw	*Piper nigrum*	KEN93-272,AU14-10E10097, US28-02030, ZA10-4255, IN17-G031	144 - 146
	13027	Salt, Iodized		AU14-10F60101,ZA10-4288	144 - 146
	13028	Spice, mixed or all spice		AU14-10E10114, UK7-13-886	147 - 149
289b	13029	Tamarind , fruit, dry, raw	*Tamarindus indica*	KEN93-289b, IN17-E064	147 - 149
289a	13030	Tamarind , fruit, fresh, raw	*Tamarindus indica*	KEN93-289a,IN17-E064	147 - 149
352	13031	Tomato, sauce (Ketchup)		KEN93-352, AU14-10A10444	147 - 149
	13032	Tomato, paste, with added salt		AU14-13A11743, ZA10-3974	147 - 149
333	13033	Tomato, soup, condensed, canned		KEN93-333, AU14-10C10452, US28-06159	147 - 149
290	13034	Turmeric, dried, ground	*Curcuma longa*	KEN93-290,AU14-10E10104	147 - 149
333	13035	Yeast, dry powder		KEN93-337, ZA10-4049, AU14-10F30011	147 - 149
	14001	Grasshopper, Brown, Fresh, Raw	*R. baileyi*	k017,i46,i47	150 - 152
	14002	Grasshopper, Green, Fresh, Raw	*R. baileyi*	k017,i46,i47	150 - 152
203 (c)	14003	Termite,Dry,Raw		KEN93-203 (c),k017,i30,i46,i64,ZA10-4333	150 - 152
203 (b)	14004	Termite,Fresh,Raw		KEN93-203 (b),k017,i36,i46,i56	150 - 152

ANNEX 4: Development of mixed dishes recipe

Desk review

A comprehensive desk review was done and the initial list of over 100 recipes for mixed dishes was compiled. Various institutions were approached to provide already developed recipes in order to provide a pool of recipes to choose from. These institutions were: Ministry of Agriculture, Livestock and Fisheries (MOALF), Kenya Agricultural and Livestock Research Organization (KALRO), Food Composition Tables (FCT) Steering committee members, Kenyan Cook book (which was developed jointly by KALRO, Kenyatta University and FAO), Ministry of health through County Nutrition Coordinators and finally focus group discussions. The recipes were included based on the following inclusion criteria:

- Ingredient availability in FCT
- Relevance to current utilization at community level
- Method of preparation is well described
- Ingredient availability at time of cooking the recipes
- Ingredient uniqueness is well described e.g dry versus fresh, whole versus refined

Recipes that were modified in nature were excluded as the intention was to capture in the first version of the recipe book, those recipes that represent the majority of Kenyan communities since these provide more relevance to field work where population dietary data is collected through surveys or other research work. Recipes whose method of preparation alters the nature of ingredients as analysed in the FCT were also excluded. Such recipes include those with a fermentation. Additionally, recipes which encountered a challenge with ingredient availability were excluded.

Based on the inclusion criteria discussed above, most of the recipes qualified into the mandatory list were picked from the local communities as provided by the County Nutrition Coordinators (CNC) and nutrition field officers of Ministry of Health and KALRO respectively.

Approval of Initial List of Recipes

This describes the consensus building process for the recipes that finally qualified for this exercise. The approval process involved discussions and review sessions with the recipes core team members comprising the MOH and FAO team both in Kenya and Rome. After the draft list was prepared, a recipe validation meeting was convened with the steering committee recipe working group members and extensively discussed the relevance of the selected recipes per community and highlighted gaps in both family recipes and infant recipes. It was unanimously agreed for all recipes to select community based options and pick representative recipes for standardization. Recipes common to all communities such as Ugali and Githeri, were classified under their different variants for example whole meal Ugali versus refined maize flour Ugali; fresh maize and beans Githeri versus dry maize and beans Githeri.

Recruiting of women for recipe development

After the list of recipes had been approved representing various communities, the next step was to find representatives from those communities who could participate in the actual process of cooking. As a rule of thumb, 3 participants were selected per community. The recipes were going to be prepared in duplicate and this informed the number of women to be selected per community.

The participants were selected from within Nairobi as much as was possible to reduce logistical requirements and complications which would be required if the recruited women would be resident outside Nairobi. Logistically speaking, the cost of hosting participants from each of 47 counties for at least 5 days during the cooking exercise was prohibitive. A simple criterion to guide the recruiting process was developed where the most important factor was that the person was from the community that the recipe represented and was familiar with the method of preparation at local level. In addition, the person was expected to understand at least Kiswahili, the national language. If this criterion was met then the individual was considered for the process.

Once recruitment had been completed a full day meeting with the participants for orientation and fine tuning of the ingredients for various dishes was held at IHTI on 18th September 2017, a day before the actual cooking exercise started.

Ingredients purchase and Institution briefing

In preparation for actual execution, the consultant in charge of recipe development, FCT National Coordinator and FAO engaged with the institution that was hosting the recipes work to discuss and agree the list of ingredients that would be required for the entire process. This was done at a meeting held at IHTI on 14th September. In the meeting, the challenge areas were identified for ingredients that were difficult to find and a route to market defined.

To ensure that correct ingredients for every recipe were used, for recipes that were unfamiliar participants of those communities were asked to assist in sourcing for any ingredients that were either not readily available within Nairobi or needed clarification as to which variant of the ingredient was required. An example of this was termites for the termite recipe that was sourced from Western Kenya.

The Cooking Process

A dry run was conducted by the recipe technical team before the actual preparation of recipes started. This was done on 18th September 2017. The aim of this exercise was to help the team anticipate the dynamics of the entire cooking process and estimate time required for a complete execution. The dry run also helped draw a movement plan for the participants.

Two groups comprising of 3 members per group were assigned cooking each day. The two groups making up 6 individuals cooked for 2 days. For every group, two people from the technical team were allocated to facilitate measuring and recording. This was meant to ensure accuracy on data collected and avoid mixed up recording or faulty measurements.

Additionally, from the dry run, it was also agreed that the person handling photography could not be assigned anything else since he was required to capture photos of raw ingredients before cooking, photos of the cooking process and photos of the final dish. He was to do this concurrently for both groups.

One person from the technical team was in charge of logistics which involved coordinating raw ingredients from the institution for every recipe for each day, checking with the institution that ingredients for every subsequent day were ready, monitoring availability of the women/participants on a daily basis in order to replace those not available for any reason and data management on a daily basis.

A movement plan for the women was developed which enabled the team determine the actual duration of the exercise after allocating women to selected recipes. The plan required daily review to confirm availability of the women. There were instances where a participant failed to show up and this affected the days output as adjustments had to be made on the recipes planned for that day.

Every morning, the day would begin with a briefing session to inform the participants of the recipes for the day, remind them of safety measures to be exercised in the kitchen, and discipline with time. Cooking attire was provided by the institution every morning. The institution also availed on a daily basis two student chefs who helped orient the women to the kitchen and the use of utilities and equipment.

The cooking process entailed a detailed description of all ingoing ingredients, a description of edible and non-edible portion of ingredient, weighing of all ingoing ingredients, record of cooking method and cooking time and a record of final measured weight of the prepared dish after cooking.

Recipe Data and Quality Control

Data generated during cooking was recording on a continuous basis. Every day, data would be entered into the FAO/INFOODS template for data collection for mixed dishes. However, due to requirement to run logistics, data entry was never completed on the same day. In most cases, this would spill over to the next day. Quality control was ensured throughout the cooking process. Every recipe was replicated twice. In addition, before ingredients were used, a process of confirming that these were the correct ingredients as described in the FCT was done. A number of additional foods such as spices, nuts others were added into the FCT so as to be able to include some recipes which were very common in certain communities but would have been excluded without the addition of these recipes. All recipe photos were labelled to ensure quality control. At the end of the second day, which marked the end of the cooking exercise for the 6 individuals the activity was closed for each of these groups with a feedback session and a group photo.

Weighing was a tedious process and required intense alertness to ensure correct measurements were taken. Data compilation and documentation was done on a continuous basis into the FAO/INFOODS template for data collection for mixed dishes. Data cleaning was done to ensure accuracy. This was then followed by calculation nutrient content using yield factors measured during the cooking and retention factors from literature, and finally all the recipes were captured in the Recipes Book with a description on the ingredients, method of preparation, and nutrient values per serving of each recipe.

ANNEX 5: Food Sampling Team

S/No	PARTICIPANT	ORGANISATION/COUNTY	ROLE
1	Mercy Githinji	Embu	Sampler
2	Monica Kirugu	Embu	Sampler
3	Henry Wambugu	Nyeri	Sampler
4	Agnes Wangare	Nyeri	Sampler
5	Edith Nyaboke	Kisii	Sampler
6	Robinson Mbeta	Kisii	Sampler
7	Iren Kanyeri	Kakamega	Sampler
8	James Musa	Kakamega	Sampler
9	Jacinta Njambi	Nakuru	Sampler
10	Winnie Kirwero	Nakuru	Sampler
11	Leah Jelagat	Trans Nzoia	Sampler
12	Kathleen Njogu	Trans Nzoia	Sampler
13	Joseph Mwaniki	Marsabit	Sampler
14	Duba Nura	Marsabit	Sampler
15	Carolyn Nekesa	Mombasa	Sampler
16	Emily Chombo	Mombasa	Sampler
17	Ann Mutisya	Machakos	Sampler
18	Domitilla Mutheu	Machakos	Sampler
19	Rose Awuori	Nairobi	Sampler
20	Gideon Rachier	KALRO – Kakamega	Sampler
21	Margaret Jommo	NPHLS	Laboratories
22	Cyprin Kabbis	SGS Laboratories	Laboratories
23	Nancy Njiine	NPHLS	Laboratories
24	Leila Akinyi	MOH nutrition	Supervisor
25	Dr. Peter Chege	Kenyatta University	Supervisor
26	Jane Wanjiru	Ministry of Agriculture	Supervisor
27	Phillip Ndemwa	KEMRI	Supervisor
28	Susan Momanyi	Kisii University	Supervisor
29	Julianna Kiio	Kenyatta University	Supervisor
30	Dancun Abudiku	FAO Marsabit	Supervisor
31	Angela Kimani	FAO	Facilitator
32	Richard Bett	FAO	Facilitator
33	John Mwai	MOH nutrition	Facilitator
34	Prof. Anselimo Makokha	JKUAT	Facilitator
35	Dr. Lusike Wasilwa	KALRO	Facilitator
36	Dr. Davies Karanja	KALRO Machakos	Facilitator
37	Dr. Victor Wasike	KALRO/BFN Project	Facilitator

ANNEX 6: LIST OF AUTHORS

Name	Organisation
Mwai, J	Ministry of Health, Division of Family Health, Nutrition and Dietetics Unit
Kimani, A	Food and Agriculture Organization of the United Nations (UN FAO) - Kenya
Mbelenga, E	Food and Agriculture Organization of the United Nations (UN FAO) - Kenya
Vincent, A	Food and Agriculture Organization of the United Nations (UN FAO) - Rome
Grande, F	Food and Agriculture Organization of the United Nations (UN FAO) – Rome
Rittenschober, D	Food and Agriculture Organization of the United Nations (UN FAO) – Rome
Murugu, D	Bounty Health and Nutrition Consulting
Charrondiere, UR	Food and Agriculture Organization of the United Nations (UN FAO) - Rome

ANNEX 6: CONTRIBUTORS

Name	Organisation
Kirogo, V	Ministry of Health, Division of Family Health, Nutrition and Dietetics Unit.
Mugambi, G	Ministry of Health, Division of Family Health, Nutrition and Dietetics Unit.
Akinyi, L	Ministry of Health, Division of Family Health, Nutrition and Dietetics Unit.
Mukiri, J	Food and Agriculture Organization of the United Nations (UN FAO) – Kenya
Gathigi, L	Formerly; Ministry of Health, Division of Family Health, Nutrition and Dietetics Unit
Makokha, A	Jomo Kenyatta University of Agriculture and Technology,
Okoth, J	Jomo Kenyatta University of Agriculture and Technology,
Njine, N	National Public Health Laboratories.
Ndemwa, P	Kenya Medical Research Institute
Wasike, V	Kenya Agricultural and Livestock Research Organization
Wasilwa, L	Kenya Agricultural and Livestock Research Organization
Tumwet, T	Ministry of Agriculture and Irrigation.
Wambugu, J	Ministry of Agriculture and Irrigation.
Kimiywe, J	Kenyatta University.
Chege, P	Kenyatta University.
Kiio, J	Kenyatta University.
Kogi-Makau, W	University of Nairobi
Njenga, J	University of Nairobi
Getrude, W	University of Eldoret
Buluku, E	Moi University.
Eric, N	International Centre for Research in Agroforestry
Kellenbeck, K	International Centre for Research in Agroforestry
Tanga, C	International Centre of Insect Physiology and Ecology.
Mwaniki, J	Kenya Nutrition and Dietetic Institute.
Momanyi, S	Kisii University.
Maundu, P	National Museum of Kenya.
Kungu, J	Nutrition International.
Kabbis, C	Société Générale de Surveillance (SGS).
Termote, C	Consultative Group for International Agricultural Research.
Omosa, E	Consultative Group for International Agricultural Research.
Njoroge, B	Nutrition Health Program plus.
Mwangi, A	Nutrition Health Program plus.
Nyaugo, I	Financial Transactions and Reports Analysis Centre of Canada.
Theuri, A	Food and Agriculture Organization of the United Nations (UN FAO) - Kenya
Ogutu, C	Food and Agriculture Organization of the United Nations (UN FAO) - Kenya

Organisations which supported Kenya Food Composition Tables 2018 Development

ISBN 978-92-5-130445-7

I8897EN/1/03.18